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Economic Report of the President

Transmitted to the Congress
February 1986

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February 1986

TOGETHER WITH
THE ANNUAL REPORT
OF THE
COUNCIL OF ECONOMIC ADVISERS

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ECONOMIC REPORT
OF THE PRESIDENT

ECONOMIC REPORT OF THE PRESIDENT

TO THE CONGRESS OF THE UNITED STATES:

The major economic objectives of my Administration from its beginning have been strong, sustainable, noninflationary economic growth and expanding economic opportunities for all Americans. To achieve these goals, we have pursued policies that are in the long-term best interest of the Nation.

The benefits of this approach are now clear. The economy has entered the fourth year of a robust expansion that has dramatically increased opportunities for all Americans. Millions of new jobs have been created. Investment opportunities have increased. Standards of living have risen. Moreover, this success has been accomplished without rekindling inflation.

We are committed to continuing and extending policies that encourage the private investment and innovation that are the foundation of this expansion. We continue to resist unnecessary increases in government spending and unwarranted interference in private markets. Sustained, strong economic growth depends critically on allowing the market system to function as freely as possible. Free markets provide proper incentives to work, save, and invest, and they ensure that the interests of consumers are served.

These basic principles were embodied in our 1981 Program for Economic Recovery and reaffirmed in the second-term Program for Growth and Opportunity. These programs do not offer "quick fixes" but rely on the inherent ability of the free market system to allocate resources efficiently and to generate economic prosperity. The fundamental responsibility of the Federal Government should be to provide a stable environment within which people can make economic decisions, not to make those decisions for them. To this end, our initial program involved four essential elements:

- Restrain the growth of Federal spending,
- Reduce personal and business taxes,
- Reduce regulatory excesses, and
- Encourage stable and moderate monetary growth.

THE CURRENT EXPANSION

The success of our policies is now apparent. Even though economic growth slowed a bit in 1985 compared with its strong performance in 1983 and 1984, the expansion has nonetheless proceeded at an encouraging pace. It is already 4 months longer in duration than the average peacetime expansion since World War II. If the expansion continues as expected throughout 1986, it will be the third longest in the postwar period.

This expansion has been characterized by unusually strong real business investment in plant and equipment due to our successful attack on inflation and to our tax policy, which stimulated investment. Real business investment has contributed nearly twice as much to real gross national product (GNP) growth in this expansion as it typically has in previous postwar expansions; as a share of real GNP, it is higher than at any other time in the postwar period. Stronger U.S. investment means not only a stronger economy today, but also higher productivity and the potential for faster growth in the future.

Strong employment growth is another outstanding feature of this recovery. Since the end of the last recession in November 1982, the U.S. economy has employed more than 9 million new workers. Furthermore, the unemployment rate fell from 10.6 percent in November 1982 to 6.9 percent in December 1985. Despite this dramatic improvement, however, we will not be satisfied until all American workers can find jobs at wages commensurate with their skills.

When we initiated our Program for Economic Recovery, we were confident that a resourceful, flexible economy, unencumbered by excessive governmental intervention, would create jobs. At the same time, we believed that restrained monetary growth would reduce inflation. Our optimism was justified. The rate of inflation is now less than one-third of the rate in 1980. During this expansion, inflation has maintained its lowest level in more than a decade despite the tremendous employment growth that the economy has generated. Reflecting in part the reduction in inflation, interest rates—especially long-term rates—have declined throughout 1985 and by the end of the year were at their lowest levels in 6 years.

Our success in reducing inflation came as a surprise to some. As inflation rose in the 1970s, some businesses and individuals incurred debt in order to purchase assets, expecting the income generated by these assets to rise with inflation while the real burden of servicing the debt decreased. With the decline in inflation, the real burden of debt servicing rose and the income generated by many assets fell. This combination of events has strained some U.S. financial institutions. Falling farm incomes have hampered the ability of some farmers to pay interest on their debt. Similarly, many less developed countries have had difficulty repaying loans from U.S. financial institutions. The stress that the undesirable rise in inflation and its desirable but unexpectedly rapid decline have imposed on the U.S. financial system emphasizes the importance of achieving and maintaining long-term price stability.

America's optimism concerning continued growth in economic opportunities is shared by businesses and individuals throughout the world. The United States has been and remains one of the few major immigrant-receiving countries, reflecting in part the economy's ability to generate economic opportunities. During the current expansion, profitable investment opportunities in the United States have also attracted foreign capital, helping to finance the rapid growth in investment. The inflow of foreign capital indicates a strong economy. As other nations continue to move toward market-oriented policies and reduce excessive government spending, taxation, and structural rigidities, they too will generate increased investment opportunities, resulting in increased growth and stronger currencies as more capital flows into their economies.

THE ECONOMIC OUTLOOK

Many factors point to continuation of the current expansion. Economic conditions at the end of 1985 were more favorable than they were at the beginning of the year and are expected to improve further. Monetary growth during the past year has been sufficient to accommodate growth in the economy. The leading economic indicators have risen in 11 of the past 12 months. Inventories are relatively low, and as sales continue to expand, production should increase to replenish depleted inventories. Interest rates have continued their decline, promising to spur additional capital spending. Furthermore, the warning signals that typically precede the end of expansions have not been observed. Thus, we feel confident that the current expansion will continue through 1986.

We expect increased growth in real GNP of 4 percent in 1986, continuing throughout 1987 and 1988 and declining gradually in 1989–91 as the economy approaches its long-run real growth trend. Given the monetary and exchange rate developments during the past year, we anticipate a slight rise in inflation in 1986–87. However, if the Federal Reserve reaffirms its resolve to achieve price stability, a goal that I support without reservation, the downturn in inflation should resume in later years.

Changing events, including erratic monetary and fiscal policies, can bring any expansion to an abrupt and unexpected halt. Our projections for the longer term are premised on the assumption that stable economic policies will foster continued economic growth and will also provide the needed flexibility for the economy to respond to external disturbances. Our policy goals reflect this commitment to economic stability as the key contribution to sustained growth, stable prices, declining interest rates, and falling unemployment. The American people have a right to expect such results and, with the cooperation of the Congress and the Federal Reserve, we expect to continue to deliver them.

THE ECONOMIC ROLE OF GOVERNMENT

In formulating our program for healthy and continued economic expansion, we recognized the limited role that government properly plays. The Federal Government cannot provide prosperity or generate economic growth; it can only encourage private initiative, innovation, and entrepreneurial activity that produce economic opportunities. An overly active government actually hinders economic progress. Federal spending absorbs resources, many of which could be better used by the private sector. Excessive taxation distorts relative prices and relative rates of return. By arbitrarily reallocating resources, it inhibits the economy's ability to grow. Thus, the best way for government to promote economic growth is to provide a foundation of stable, predictable economic policies, and then to stand back and let the creative potential of the American people flourish.

The Federal Government has several definite responsibilities that my Administration continues to uphold. The first is to provide an adequate national defense. World peace and security require the United States, as the leader of the free world, to demonstrate its willingness and ability to defend its own national security and to contribute to the defense of its allies.

Furthermore, we will not ignore the less fortunate in this society. My Administration continues to provide an appropriate safety net to aid those individuals who need help. At the same time, we have worked to develop a strong, vibrant, opportunity-generating economy that can offer meaningful jobs to all who are able to work. The economic expansion has done much more to reduce poverty than any government transfer program. The significant decline in the percentage of the population in poverty in 1984 reflects both the success of our programs and the strength of the economy. Moreover, tax reform will benefit the working poor. My proposed tax reforms eliminate the Federal income tax burden of most working poor.

Finally, even though we believe that markets generally allocate resources most efficiently, there are a few special cases, such as air and water pollution, in which the market mechanism alone may be inadequate. In these instances, government intervention is necessary, but even here, it should be based on market principles. For example, the Environmental Protection Agency has approved arrangements that enable firms to earn credits for reducing emissions below the required limit, which they can sell to other firms facing higher costs of emission control. In this way, environmental quality is maintained and improved while the costs of compliance decline.

Control Federal Spending

Fulfillment of these limited responsibilities, however, does not require the level or the rate of growth of Federal spending that the Nation has been experiencing. In spite of our efforts, spending remains excessive and has been the primary cause of the large budget deficit. Tax rate cuts did not generate this deficit; in fact, current tax receipts are as large a share of GNP as they were in the late 1970s, even after the reduction in tax rates that we initiated in 1981. The key to resolving the Federal budget deficit is to restrain unneeded spending. Spending, not the deficit, is the true indicator of the cost of government, because it measures the total economic resources diverted from the private sector. Excessive spending affects the economy in deleterious ways regardless of whether it is financed through taxation, borrowing, or even inflation. Private capital formation is reduced, resources are inefficiently allocated, and economic growth is slowed.

I applaud and support the newly enacted Balanced Budget and Emergency Deficit Control Act of 1985, known commonly as Gramm-Rudman-Hollings, as a way to work with the Congress to reduce Federal spending and the deficit. I intend to submit budgets in each of the coming years that satisfy the act's deficit targets, not by sacrificing the programs essential to the Nation, but by reforming or eliminating those programs that are ineffective or nonessential. I reject the notion of increased taxes. Higher taxes would only encourage more Federal spending and limit the economy's ability to grow.

Gramm-Rudman-Hollings accomplishes only part of our long-term objective of Federal fiscal responsibility. Properly applied, it will produce a balanced budget by 1991, but it does not guarantee a continued balanced budget thereafter. We must now direct our attention to a constitutional amendment providing for a permanently balanced budget. Together, these two measures will provide an orderly transition to a balanced budget, restrain future spending, and ensure that future fiscal decisions are prudent and responsive to the national interests. Accordingly, I continue to support strongly and to urge the adoption of a balanced-budget constitutional amendment. I also seek legislation that would authorize the President to veto individual line items in appropriations measures. Such authority is essential to ensure that only effective and essential government programs are funded.

Reform Taxes

Over the years, successive modifications of the Federal tax code have resulted in a complex tax system that contains many loopholes and artificially encourages some types of activities at the expense of others. Furthermore, the inflation of the 1970s distorted the overall pattern of capital taxation and pushed personal incomes into ever-higher tax brackets, discouraging saving and investment. Our actions to reduce tax rates have corrected many of these distortions and inequities. Individual income tax rates have been reduced and indexed to the inflation rate; effective tax rates on new investment have been lowered substantially. Still, more must be done.

In May 1985, I submitted to the Congress a comprehensive reform of the tax code to make it simpler, fairer, and more conducive to economic growth. I proposed reducing marginal tax rates for individuals and businesses, broadening the tax base by eliminating the majority of existing loopholes, taxing different activities consistently so that resources are allocated on the basis of economic merit and not tax considerations, and compensating for or eliminating much of the remaining influence of inflation on effective tax rates on capital. Just before it recessed, the House of Representatives passed a tax reform bill that incorporated some of these principles. Despite substantive differences between my proposal and the House bill, I urged its passage to move the legislative process forward. We will now work with the Senate to generate a fair and simple tax code that is truly pro-family, pro-jobs, and pro-growth.

Eliminate Counterproductive Regulation

Tax reform is only one part of our goal to enable markets to function more efficiently in allocating resources. We have also worked hard to identify and remove government regulations that impede the operation of markets, inhibit competition, or impose unnecessary costs on firms and unnecessarily high prices on consumers. The regulation of domestic oil prices provides a good example of the deleterious economic effects that regulation can have as it distorts relative prices and prevents necessary adjustments. The results of my accelerating the deregulation of oil prices in January 1981 are now apparent. Oil imports have declined, and the Organization of Petroleum Exporting Countries has found it impossible to sustain its previous levels of high prices. In contrast, the natural gas market is still plagued by distortions induced by price controls. In 1983, we unsuccessfully urged the Congress to deregulate natural gas prices. We will again pursue legislation that would completely deregulate natural gas prices. In addition, we are proposing further deregulation of the trucking industry.

We will continue efforts to reduce government involvement in two particular sectors of the economy. First, the banking and credit system remains rife with regulations and loan guarantees that arbitrarily allocate credit and hamper the system's ability to adapt to changing economic conditions. While we must continue to protect the public against severe economic disturbances, we should allow financial institutions greater freedom in determining the composition of their assets and liabilities so that they can respond more flexibly to the changes they encounter.

Second, heavy government involvement also persists in many agricultural markets. Government policies, intended as solutions, have so distorted incentives that they have actually caused some of agriculture's current problems. The legislation that I proposed in 1985 was designed to return American agriculture gradually to a free market. The bill passed by the Congress in late 1985 contained some of my proposed reforms, but preserved some of the policies that now hamper agriculture. In particular, it maintained counterproductive government intervention in the dairy industry, mandated export subsidies, and continued costly distortions of the sugar market. We will continue to pursue further agricultural reform that lessens government involvement in these areas and increases opportunities for farmers to compete successfully in world markets.

Transfer Some Services to the Private Sector

The Federal Government has increasingly sought to provide services that can be more efficiently provided by the private sector. To address this problem, I have established a working group to investigate which government functions could be effectively returned to the private sector. I have also included several initiatives in this area in the recently released budget. This strategy does not necessarily require eliminating services now provided by the government. Rather, it would make private alternatives available. Such a strategy ensures production of services that are demanded by consumers, not those chosen by government bureaucrats. It also leads to more efficient and lower cost production of those services, and often removes government-imposed restraints on competition.

Maintain Free and Fair Trade

Our pursuit of unencumbered markets is not confined to the domestic economy. Our international trade policy rests firmly on the foundation of free and open markets. The benefits of free trade are well known: it generates more jobs, a more productive use of a nation's resources, more rapid innovation, and higher standards of living both for this Nation and its trading partners. While a unilateral commitment to free trade benefits the Nation, Americans gain even more when U.S. trading partners also open their markets. My Administration will actively pursue this goal. An important part of our trade program is to begin a new round of multilateral trade negotiations. Under the auspices of the General Agreement on Tariffs and Trade, we are seeking to engage U.S. trading partners in comprehensive negotiations that will generate freer trade, increased access for U.S. exports, and a stronger international trading system. To complement this initiative, we are continuing to explore the possibility of establishing bilateral free trade zones with some U.S. trading partners.

We do not blindly pursue free trade. We also strive to ensure that trade is fair by vigilantly enforcing current trade laws. Unfair trade practices abroad harm U.S. exporters as well as reduce standards of living worldwide; this is unacceptable. In an unprecedented move, I have asked the U.S. Trade Representative to initiate unfair trade practice investigations under Section 301 of the Trade Act of 1974. Such investigations are not intended to produce retaliatory action by the United States, but rather to achieve more open markets internationally. In this way, we hope to convey the message that a commitment to free and fair trade is a reciprocal obligation in this increasingly interrelated world trading community.

The large trade deficit that has evolved during the current expansion has subjected our free and fair trade policy to much criticism, especially from the Congress. During the past year, more than 300 pieces of protectionist legislation have been considered or proposed. While the conditions that have led to the trade deficit have adversely affected some U.S. industries, increased protectionism is not the solution. Protectionist measures will have little effect on the trade balance and will only decrease standards of living and inefficiently redistribute resources within the economy.

Our agreement with four other major industrialized nations in September 1985 was an important recognition that economic policy changes across countries (not only in the United States) are essential to correct trade imbalances worldwide and to realign currency values. To this end, we reaffirmed our commitment to continue efforts to reduce the Federal Government deficit by lowering spending as a share of GNP. We urged the Congress to enact Gramm-Rudman-Hollings to achieve that goal. America's trading partners, in turn, committed themselves to policies designed to foster increased internally generated economic growth and, hence, increased demand for U.S. exports. These policy objectives are important for less developed countries as well. Indeed, a central facet of the Secretary of the Treasury's recent initiatives to assist in resolving the debt-servicing problems of these countries is that they pursue policies to promote growth, reduce inflation, and secure balance of payments adjustment.

CONCLUSION

My Administration recognizes the responsibility of the Federal Government to promote economic growth and individual opportunity through policies that lead to maximum employment, production, and purchasing power. We intend to maintain this course with policies that continue to promote strong, sustainable, noninflationary growth and provide expanding economic opportunities for all. We shall continue to resist additional government involvement as a solution to short-term problems. Such involvement has been unsuccessful in the past and ultimately becomes part of the problem rather than part of the solution. With the cooperation and support of the Congress and the independent agencies, we will pursue the appropriate policies necessary to sustain the current expansion and to stabilize prices.

Ronald Reagan

February 6, 1986

THE ANNUAL REPORT
OF THE
COUNCIL OF ECONOMIC ADVISERS

LETTER OF TRANSMITTAL

COUNCIL OF ECONOMIC ADVISERS,
Washington, D.C., January 31, 1986.

MR. PRESIDENT:

The Council of Economic Advisers herewith submits its 1986 Annual Report in accordance with the provisions of the Employment Act of 1946 as amended by the Full Employment and Balanced Growth Act of 1978.

Sincerely,

Beryl W. Sprinkel

Beryl W. Sprinkel
Chairman

Thomas Gale Moore

Thomas Gale Moore
Member

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CHAPTER 1

Inflation, Disinflation, and the State of the Macroeconomy

THE AMERICAN ECONOMY is now in the fourth year of a robust expansion that has increased employment by more than 9 million, sustained the greatest advance in business fixed investment of any comparable period in the postwar era, while inflation has remained at less than a third of the rate prevailing when the Administration took office. Interest rates are at the lowest levels of this decade. Long-term interest rates, in particular, have declined 5 percentage points from their peaks in 1981, and home mortgage rates are down by 7 percentage points. Worldwide confidence in the vitality of the U.S. economy has been restored, as is reflected in the unprecedented inflow of foreign investment and the substantial appreciation of the dollar since 1980. The outlook is favorable for continuation of a healthy expansion. After slowing in the second half of 1984, economic activity is again accelerating. The recent moderate decline in the dollar bodes well for an eventual improvement in the trade balance. A modest and temporary acceleration of inflation is possible in 1986. But with appropriate economic policies, lower inflation, and ultimately price stability are achievable goals for an economy that continues to grow and to generate opportunities for all Americans.

Despite the impressive progress of the U.S. economy, important problems remain. Although the 3.8 percentage point decline in the unemployment rate since November 1982 far exceeds the average decline for a comparable period in earlier postwar expansions, the total unemployment rate remains high by postwar standards. Federal spending consumes an unprecedentedly large share of gross national product (GNP) for a peacetime period, diverting resources that could be more productively employed in the private sector. Determined efforts and politically difficult decisions will be required to bring Federal spending into line with revenues and thereby reduce the fiscal deficit. Inflation, now in abeyance, could be reignited by excessive monetary growth. Alternatively, a sudden move to sharply lower money growth could push the economy once again into recession.

American agriculture faces severe financial problems. The strong dollar—itself a manifestation of vigorous growth and bright prospects for the U.S. economy compared with sluggish performance or deep difficulties of many other countries—has contributed to the problems of U.S. agriculture and to the deterioration of the U.S. trade balance. Even after 3 years of solid real growth and substantial gains in employment, workers and firms in a number of industries exposed to international competition have had trouble adjusting to an altered competitive environment. Individuals, businesses, and countries that borrowed extensively during the period of rising inflation have had problems meeting their debt service obligations, and these problems have affected the financial institutions that hold their loans.

This *Report* examines these problems and discusses the appropriate economic policies to deal with them. Chapter 1 sets the stage for subsequent chapters. It reviews the critical features of the process of inflation and disinflation over the past 15 years that lie at the root of many of the economic problems that still confront the United States and many other countries. This chapter also discusses key characteristics of the current expansion and policies needed to extend and prolong its desirable features. Chapter 2 considers the relationship between the United States and the economic performance and growth of developing countries, in the context of the open system of international trade and investment. The focus is on the economic problems that have recently afflicted many developing countries, on the policies that offer the best hope of generating rapid and sustainable growth in these countries, and on the roles of the industrial countries and of the international economic system in maintaining an environment conducive to worldwide prosperity.

Chapter 3 examines issues of international trade policy for the United States, in particular the fallacious arguments used to support protectionist measures, the record of recent trade policy actions, and the Administration's policy initiatives for free and fair trade. Chapter 4 investigates government programs to provide assistance to American agriculture. It finds that governmental efforts to transfer income to agriculture primarily by raising prices received by farmers create important economic distortions and inefficiencies. More efficient, less costly mechanisms are available to achieve this income transfer.

Chapter 5 discusses the successful efforts to reduce government regulation. It explores the potential for further actions that will allow private businesses to produce more efficiently and to provide to consumers the goods and services they desire, while preserving standards of health, safety, and environmental quality. Chapter 6 considers problems affecting credit markets and institutions and policies needed to deal with these problems: the problems of the thrifts, of the Farm Credit System, and of the Pension Benefit Guaranty Corporation; and policies relating to government lending and loan guarantees, to government-sponsored financial intermediaries, and to deposit insurance. Finally, Chapter 7 examines a matter that is today important for economic and social policy and that has been of great concern to America throughout its history—the economic effects of immigration.

Two central themes dominate this *Report* and, not coincidentally, the Administration's approach to economic policy. First, the private enterprise, free market system is generally the best mechanism to organize efficient and full employment of the economy's resources and to generate genuine opportunity and rising living standards for all. To assist the private sector, the government should limit itself to providing essential public services and should avoid blunting or distorting economic incentives by high or uneven tax rates and by unnecessary or inappropriate regulation.

Second, economic performance is seriously injured by the macroeconomic instability inevitably associated with cycles of inflation and disinflation. Such injury was reflected in the relatively sluggish economic growth of the 1970s. It was most acute and most apparent when rising inflation confronted efforts to reduce inflation by lowering monetary growth: in 1969–70, in 1974–75, briefly in late 1979 and early 1980, and finally on a more persistent basis in 1981–82. In each confrontation, the outcome was a recession; in two cases, a severe and prolonged recession.

Even now, the consequences of earlier inflation and disinflation are still felt in the problems afflicting the American economy. The present level of unemployment is partly the heritage of past inflation and necessary actions to control it. Problems in agriculture, in industry, and in international trade are related to fluctuations in commodity prices, asset values, and the value of the dollar that, in turn, are linked to the process of inflation and disinflation and to the economic policies that underlie that process. Problems of the credit system—of borrowers, lenders, and government insurance agencies—derive partly from sharp, unexpected movements in interest rates, asset values, and income levels that accompany the inflation-disinflation process.

The healthy overall performance of the U.S. economy may be small comfort to those affected by its remaining problems. But with time and with appropriate policies, these remaining problems can be corrected. The cure, however, does not lie in policies that would reignite inflation and once again inflict its debilitating effects on the American economy. Rather, the cure lies with policies that will enhance private incentives for growth, while maintaining a stable macroeconomic environment.

THE RISE OF INFLATION AND THE TRANSITION TO PRICE STABILITY

THE LEGACY OF THE 1970s

The prevalent view of macroeconomic policymaking during much of the post-World War II period presumed a stable, long-term tradeoff between inflation and unemployment. Policymakers believed that by accepting the increase in inflation associated with more expansionary monetary and fiscal policy, they could achieve an increase in the rate of real growth and a permanent reduction in the unemployment rate. As both inflation and unemployment generally rose during the 1970s, this view of the economy was repeatedly contradicted by events.

Table 1-1 compares the behavior of key macroeconomic indicators and policy variables during the relatively low-inflation period from the second quarter of 1954 through 1970 with the relatively high-inflation period from the fourth quarter of 1970 through 1982. The end points of these periods were chosen because they correspond to business cycle troughs. Between the two periods, the inflation rate, as measured by the GNP implicit price deflator, more than doubled. A higher rate of monetary expansion, a larger share of government spending in GNP, and a larger total government deficit as a share of GNP were all associated with this rise in inflation. The higher rate of inflation and the more expansionary monetary and fiscal policies, however, were not associated with either a lower unemployment rate or a higher rate of real GNP growth. Thus, the secular rise in inflation did not buy either more real growth or less unemployment.

TABLE 1-1.—*Macroeconomic indicators, 1954–82*

[Percent]

Period (trough to trough)	Average annual rate of change [1]			Average level			
	GNP implicit price deflator	Real GNP	M1	Unemployment rate[2]	Corporate Aaa bond yields (Moody's)	Government deficit as percent of GNP[3]	Government expenditures as percent of GNP[3]
1954 II–1970 IV	3.0	3.4	3.1	4.8	4.70	0.3	27.7
1970 IV–1982 IV	7.5	2.3	6.8	6.7	9.48	1.2	32.1

[1] Change from 1954 II to 1970 IV and from 1970 IV to 1982 IV.

[2] Unemployed as percent of labor force including resident Armed Forces.

[3] Government deficit and expenditures relate to Federal and State and local government sectors, national income and product accounts.

Note.—Based on seasonally adjusted data, except for bond yields.

Sources: Department of Commerce (Bureau of Economic Analysis), Department of Labor (Bureau of Labor Statistics), Board of Governors of the Federal Reserve System, and Moody's Investors Service.

The rise in inflation is also reflected in the secular rise in interest rates, represented in Table 1-1 by the corporate Aaa bond rate. Since the recession trough in 1954, each successive interest rate cycle has generated both higher peaks and higher troughs in interest rates; each cyclical rise in interest rates has taken rates to new highs and each successive downturn has failed to bring rates back to their previous lows. The unemployment rate shows a similar upward trend over the same period.

THE ROLE OF MONEY GROWTH

There is a well-established causal link between money growth and inflation over the long run that has been supported by empirical evidence for the United States as well as many other countries. The exact nature of this relationship varies with time and institutions, but the long-run relationship between appropriately defined money growth and inflation is difficult to refute. The relationship between the trend rate of money growth and inflation is illustrated for the United States since 1959 in Chart 1–1. The secular rise in inflation from the mid-1960s through 1980 was associated with an upward drift in the trend rate of money growth. With a lag of 1 to 2 years, most significant slowdowns in money growth are also reflected in subsequent movements in the inflation rate. There are, however, several periods, notably the period since 1982, when the inflation rate has diverged from the trend rate of money growth. The period since 1982 is analyzed later in this chapter.

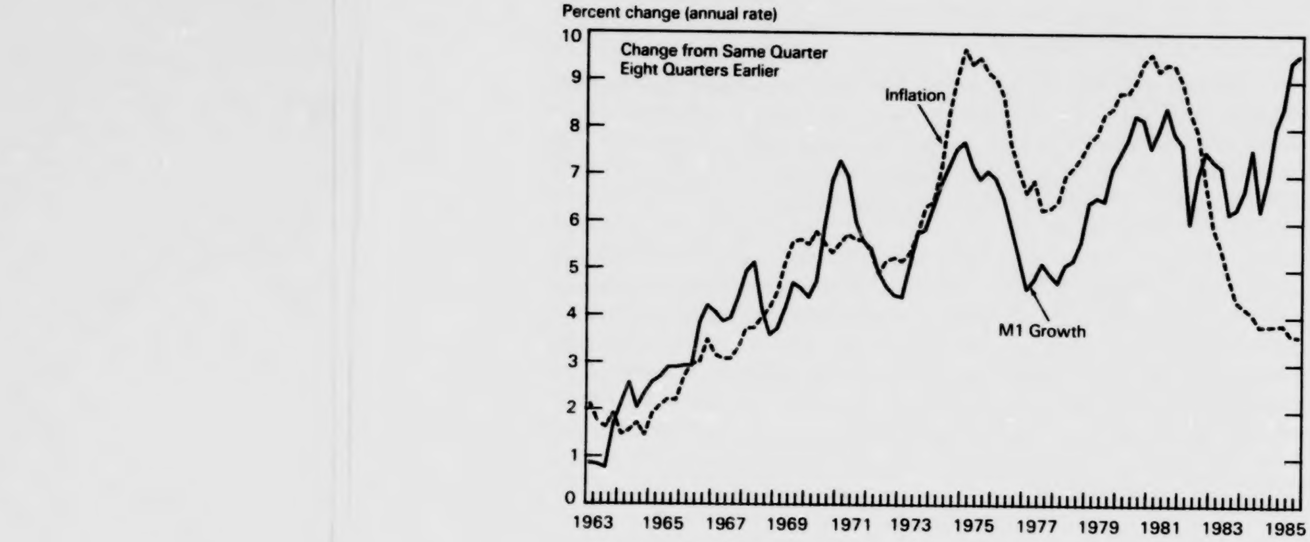
There are several reasons why the inflation rate may not track money growth closely in the short run. The short-run impact of a change in money growth may differ, depending on the state of inflation expectations. If, for example, an increase in money growth occurs when current inflation rates are already high, or when monetary or fiscal actions are already perceived as inflationary, the rise in money growth is likely to show up in the inflation rate more quickly. The immediate effect of a given change in money growth also depends on whether it is perceived as permanent or just a temporary deviation from a long-term policy path. An acceleration of money growth that is perceived to be a permanent move toward a more inflationary policy is likely to translate more immediately into a higher inflation rate.

THE ROLE OF RELATIVE PRICE CHANGES

In some periods, short-term deviations of the observed inflation rate around that implied by long-term money growth can be understood by recognizing the difference between relative price changes and inflation. A relative price change is a change in the price of one particular good or service relative to others. Movements in the prices of individual goods and services arise naturally from the interplay of market forces and reflect changes in costs of production or consum-

Chart 1-1

M1 Growth and Inflation
M1 Growth Lagged Eight Quarters



Note.—Inflation measured by change in GNP implicit price deflator.
Based on seasonally adjusted data.

Sources: Department of Commerce and Board of Governors of the Federal Reserve System.

ers' preferences. Changes in relative prices, however, should not be confused with inflation or deflation. Inflation is an ongoing increase and deflation is an ongoing decrease in the general price level. Relative price changes do not cause an ongoing change in the average price level unless they are accommodated and generalized by a change in money growth.

Changes in relative prices, however, may contribute to short-run movements in the price level. As Chart 1-1 illustrates, the observed inflation rate rose above that implied by the long-run trend of money growth during the 1970s. This partially reflects the short-term effects of the oil price shocks of 1974 and 1979. In addition, a poor harvest in 1974 helped push up agricultural prices. Another important contributing factor in the 1979-80 period was the depreciation of the U.S. dollar that began in 1977 and lasted until mid-1980. The decline in the real exchange rate (the observed exchange rate adjusted for price level differences between countries) was another example of a relative price change that raised the prices of imported goods and added short-term upward pressure to the measured inflation rate.

As the trend rate of money growth rose during the 1970s, many significant relative price adjustments—in energy, food, and the dollar—all worked in the direction of raising the observed rate of inflation above the underlying rate determined by monetary growth. But these relative price changes tended to be self-limiting and self-reversing, while inflation was cumulative and ongoing. The annual average rate of M1 growth more than doubled from 3.5 percent during the 5-year period 1961–65 to 8.6 percent in the 5 years ending in 1980. Thus, the money was supplied to fuel an upward trend in the rate of inflation.

Although the decline of the dollar in the late 1970s contributed to a short-term rise in the measured inflation rate, in a more basic sense the rise in money growth and inflation also contributed importantly to dollar depreciation. Specifically, the rise in 1977 and 1978 of the inflation rate in the United States relative to that in its major trading partners, and the concern this generated about the future course of U.S. monetary policy, contributed to a depreciation of the dollar in the late 1970s. Similarly, the oil price increase in 1979 was probably not independent of either the U.S. inflation rate or the depreciation of the dollar. The reduction in the real price of oil received by oil exporters caused by the rise of U.S. inflation and the depreciation of the dollar likely helped induce additional increases in the price of oil. Therefore, in a short-term context the relative changes in both the value of the dollar and the price of oil helped increase the observed inflation rate. But those relative price shifts were related to a rising inflation rate and to the monetary policy that accommodated that rise.

The oil price increases induced a wealth transfer from oil-importing countries to oil-exporting countries. In an attempt to offset partially the wealth transfer and the associated reduction in real output, many industrialized countries increased the rate of money growth. The rise in money growth validated the upward pressure on the price level caused by the oil price increases and increased the rate of inflation. Despite the rise of inflation, real energy prices rose. Over time the resource allocation function of higher oil prices encouraged conservation and the development of more oil and alternative energy sources. But the wealth transfer to oil exporters was unavoidable. The rise in inflation merely redistributed wealth among U.S. citizens.

As inflation rose over the 1970s, the tendency to confuse relative price changes with inflation led to a series of short-term explanations or rationalizations of the rising inflation rate. Inflation was blamed on oil price increases, poor agricultural harvests, wage pressures, or whatever relative price adjustment was topical. Relative price changes do not explain ongoing inflation of the magnitude experienced over the decade. But such anecdotes implied that the general rise in inflation somehow had little to do with monetary policy and was beyond the control of policymakers.

THE DISINFLATION OF THE 1980s

Many analysts date the new resolve to reduce inflation in the United States to October 1979, when the Federal Reserve announced a change in its operating procedures to more direct control of the money supply. M1 growth fluctuated widely in 1980 and showed no sustained deceleration until 1981. Despite this short-term variability, the trend rate of money growth (measured as the annual rate of change over eight quarters) fell from 8.4 percent in the third quarter of 1979 to 6.3 percent 3 years later. This monetary deceleration provided the initial disinflationary impetus. Inflation in 1982, as measured by the consumer price index (CPI), was less than half the 1980 rate and by 1983 had been reduced to less than one-fourth the 1980 rate. Thus, the decline in inflation was greater than would have been implied by the decline in the trend of money growth.

The important relative price shifts of the 1970s that had pushed the observed rate of inflation above its underlying rate ended or were reversed during the 1980s. The shift to a disinflationary monetary policy probably contributed to an appreciation of the dollar that began in mid-1980, that in the short term, has helped to hold down prices of imported goods and has generated added price competition for many domestically produced goods. Following decontrol, domestic crude oil prices (measured by the producer price index) dropped more than 21 percent from the end of 1981 to the end of 1985 and the energy products component of the CPI has registered very modest increases in each of the past 4 years. In addition, deregulation in some industries, such as transportation and telecommunications, has likely caused relative price declines that are important enough to affect the composite price indexes. All these relative price adjustments probably had some favorable effect on the observed inflation rate, holding it temporarily below the rate implied by long-term money growth.

In some cases, individual prices have actually declined in recent years. The index of raw commodities spot prices has, for example, declined 26 percent since early 1980; prices of some commodities are down as much as 40 to 50 percent. In each case, however, these relative price declines do not constitute deflation, anymore than the nearly 34 percent increase in the price of medical care services since 1982 constitutes rapid inflation. While relative price changes have helped reduce the observed inflation rate in recent years, as long as the general price level continues to rise—albeit at a much slower pace—generalized inflation persists.

DISINFLATION AND THE VALUE OF THE DOLLAR

The dramatic move from inflation to disinflation had a marked impact on the U.S. dollar exchange rate. When analyzing exchange rate movements and their effects, it is important to distinguish between the nominal and the real exchange rate. The nominal exchange rate is observed in exchange markets; the real exchange rate is the nominal rate adjusted for price level differences across countries. If changes in the nominal rate reflected only relative price level changes across countries, the real rate would remain constant. By definition, real exchange rate changes reflect changing relative prices and, thus, both affect and are affected by real economic variables.

Nominal exchange rates are asset prices whose values depend not only on current market conditions and policies, but also on expected future market conditions and policies. Nominal exchange rates tend to be more forward looking than domestic price levels; that is, exchange rates adjust more rapidly to actual or expected events than do domestic price levels. As a result, nominal and real exchange rate movements tend to move together. For example, when market participants perceive that one country's policies have become relatively inflationary, the nominal exchange rate depreciates almost immediately. Because domestic prices do not rise immediately, a real depreciation also occurs. When domestic prices begin to rise, the real exchange rate also rises without a concomitant change in the nominal rate because it has already moved in anticipation of a rise in domestic prices.

An unprecedented appreciation in both the nominal and real exchange rate has accompanied the turnaround in the U.S. inflation rate. From July 1980 to February 1985 the multilateral trade-weighted value of the dollar rose 87 percent in nominal terms and 78 percent in real terms. No single factor explains the appreciation of the dollar. It appears, however, that the tightening of Federal Reserve policy and the market perception that future monetary policy would be markedly less inflationary, stimulated a substantial reversal of inflation expectations and contributed to a rise in the dollar. As would be expected, the U.S. domestic price level adjusted less rapidly to this change and, hence, the real exchange rate rose as well. The subsequent fall in the domestic inflation rate reinforced market expectations and may have contributed to further strengthening of both nominal and real dollar exchange rates in 1982. The continued rise of the dollar from 1982 to early 1985 apparently reflects factors other than, or in addition to, changes in monetary policy. The strength of the U.S. recovery and the rise in the real after-tax rate of return on U.S. investment have probably played an important role in the rise of the dollar since 1982. Nonetheless, it is likely that at least the first stage of the dollar's rise was in large part due to the Federal Reserve's shift to a disinflationary policy and the subsequent success in bringing down U.S. inflation relative to the rest of the world.

THE COSTS OF INFLATION

The inflation of the 1970s, particularly the latter part of the decade, had widespread effects on economic behavior. Market interest rates in the United States rose to levels unprecedented in modern times. Many households shifted to real estate investment as a hedge against inflation. Workers demanded ever-rising wage rates as inflation eroded the real value of income and bracket creep imposed higher tax rates even on incomes that were not rising in real terms. Inflation-induced distortions in the tax code altered relative after-tax rates of return, thereby encouraging otherwise noneconomic investments purely on tax considerations. Profitability declined as many producers faced rising costs, declining productivity, and higher effective tax rates.

A rising inflation rate imposes significant costs on an economy. In theory, an economy can adjust to anticipated inflation if no institutional or legal constraints prevent adjustment. In practice, however, the evidence indicates that the variability of inflation rises with the inflation rate, so that it is likely to be more difficult to anticipate and adjust for higher inflation. In addition, in most economies—and the United States is no exception—many regulations, institutions, and laws are defined in nominal terms so that even if inflation is adequately anticipated, adjustment cannot be complete. To the extent that inflation is imperfectly foreseen or adjustment constrained, it is likely to distort price signals and economic incentives.

It is well recognized that unanticipated inflation causes an arbitrary redistribution of wealth and income. The redistribution of wealth from lenders to borrowers, for example, is well established, as is the adverse effect of inflation on those living on a fixed income. But these distributive effects are not a comprehensive measure of the economic costs of inflation. In addition, high and variable inflation harms allocative efficiency and thereby aggregate economic performance. This cost of inflation is especially important because everyone loses to the extent that the inefficiencies and distortions associated with inflation impair economic performance.

The most basic way in which inflation can impede economic efficiency is by interfering with the appropriate adjustment of relative prices. In an inflationary environment, it is difficult to disentangle inflation-induced price increases from price changes caused by changes in underlying market conditions. With price signals more difficult to interpret, the ability of the market mechanism to allocate economic resources to their most efficient uses can be impaired. Moreover, a high and variable inflation rate encourages people to devote economic resources to adapt to higher prices, to protect against future inflation, and to attempt to gain from inflation. Activities undertaken to adjust to inflation and activities designed to beat inflation or offset its effects are a waste of economic resources; in an environment of stable prices, these resources would be put to more productive use.

These adverse effects of inflation can be exacerbated by laws and government regulations that are defined in nominal terms. Government regulations or tax policies frequently interact with rising inflation to encourage noneconomic activity designed to circumvent regulation or avoid taxes. Many of the distortions and disincentives that arose during the inflation of the 1970s resulted from the interaction of the inflation rate with government tax and regulatory policies that were defined in nominal terms.

Because a higher inflation rate is also likely to be more variable, rising inflation generates greater uncertainty about the outlook for inflation. Uncertainty about future inflation in general makes financial planning more complex and in particular makes investors less willing to hold long-term, fixed-rate financial assets. As both inflation and interest rates in the 1970s rose above what had been generally expected by financial market participants, holders of fixed-rate financial assets repeatedly incurred significant capital losses. Investors were encouraged to shift funds out of financial assets into certain real assets, such as real estate and gold, the prices of which rose more rapidly than did the general price level. The reluctance of investors to hold financial assets, particularly long-term financial assets, implies a less-than-optimal allocation of capital, as well as an economic loss to the extent that the resources used to adjust portfolios could be put to more productive uses.

Disinflationary policies were adopted on three separate occasions before 1981. As can be seen in Chart 1-1, in 1969–70 and in 1974–75 money growth was reduced substantially and, with a lag of 1½ to 2 years, inflation also declined. In addition, M1 growth fell in late 1979 and early 1980, but reaccelerated during the second half of the year. In all three episodes, a recession was associated with the advent of disinflationary monetary policy. In theory it may be possible to devise a monetary policy strategy that would reduce inflation without necessarily also causing an economic downturn. In practice, however, disinflationary monetary policy in the United States, as well as in other countries, has frequently been associated with a slowdown in real economic activity in the short run. This is often the major cost of a rise in inflation: the disinflationary monetary policy that becomes necessary is, in practice, likely to result in lost output and employment.

Moreover, these are likely to be only the immediate costs of a disinflationary policy. To the extent that expectations of inflation are built into financial contracts, the effects of a disinflationary policy will linger after the actual inflation rate has fallen. Many of the credit market and other sectoral problems in the economy today are fundamentally related to the inflation-disinflation process. The rise in the inflation rate in the 1970s provided a powerful incentive to assume debt; the tax deductibility of interest expense strengthened this incentive. Assumption of debt is a reasonable strategy in a high-inflation environment, but it leaves both lenders and borrowers vulnerable to an unanticipated change in inflation. In the agriculture, real estate, and energy sectors, for example, debt was incurred in the late 1970s on the presumption that real asset values and some commodity prices would continue to rise at rapid rates. Much of the credit extended to less developed countries (LDCs) when inflation was high was made on the assumption that energy and raw materials prices would continue to rise rapidly enough to generate the foreign exchange earnings needed to service the debt. The subsequent sectoral debt problems arose when the actual inflation rate diverged from these expectations.

In the late 1970s and in 1980 those who borrowed money at fixed interest rates gained as inflation rates rose faster than expectations. A substantial part of their gain came at the expense of lenders and holders of fixed-rate financial assets. Later, when inflation declined more rapidly than anticipated, borrowers' real debt-service burdens rose. Thus the debt problems in various sectors, as well as the associated stress in some financial institutions, are related to the market revaluation of real assets and outstanding debt in a disinflationary environment. In addition, debt continued to be assumed and credit extended on the assumption of high inflation even as inflation fell. The failure of inflation expectations to decline with the inflation rate after 1981 has therefore prolonged the period of adjustment and exacerbated the debt problems in some sectors. The economic situation in LDCs is discussed in Chapter 2, the agriculture sector is analyzed in greater detail in Chapter 4, and the problems of financial institutions are examined in Chapter 6.

THE "OPTIMAL" DISINFLATION PATH

Although economists generally agree that reducing inflation requires a decline in the trend of money growth, they agree far less on what the appropriate disinflationary path is. Some adverse real and financial effects are almost inevitable, but it is not clear what policy path or pace of disinflation is most likely to minimize economic disruption. It is possible, however, to identify some aspects of a disinflationary policy that would be expected to facilitate the adjustment process and minimize the resultant economic dislocation.

Once the expectation of continued high inflation is built into economic institutions and behavior, the transition to disinflation requires that expectations and behavior, predicated on years of experience with a rising inflation rate, be realigned. The economic costs—lost jobs and output—associated with reducing inflation occurs when private behavior that is adapted to an inflationary environment confronts a disinflationary monetary policy. Even though money growth is ample to support real economic activity, it will be insufficient to support as well a level of nominal economic activity that presumes a continued high rate of inflation.

The extent of the economic disturbance associated with reducing inflation depends on the responsiveness of inflation expectations. The longer it takes for expectations to adjust, and therefore the longer inflation-based behavior persists, the longer is the likely period during which real growth is restricted by disinflationary monetary policy. Conversely, the more quickly the public comes to believe in lower inflation, and adjusts nominal behavior accordingly, the more quickly decreased money growth becomes sufficient to support adequate real economic growth. A disinflationary policy that assures the public of the government's commitment to controlling inflation and thereby fosters the adjustment of inflation expectations is therefore also likely to minimize the associated economic dislocation.

Inflation was temporarily reduced in two separate periods during the 1970s, then allowed to reaccelerate each time to a rate higher than the previous peak. This probably contributed to public skepticism about the government's ability or willingness to control inflation over the long run. In addition, policies adopted and events in 1980 probably added to this skepticism. Money growth declined in late 1979 and early 1980 and the money supply declined absolutely after credit controls were imposed in March 1980. Interest rates fell sharply, as did the short-term inflation rate. All these developments were abruptly reversed after mid-1980, however, as money growth, interest rates, and inflation all soared to double-digits. The extreme volatility of macroeconomic policy and the associated volatility in interest rates and the inflation rate likely increased the uncertainty about future inflation and interest rates, as well as about policy itself.

Credible, pre-announced policies that are consistent with the stated goal of lower inflation can facilitate the downward adjustment of inflation expectations. This is true for fiscal as well as monetary policy. In contrast, when policy goals are unclear, and actions are unpredictable or inconsistent with long-term goals, adjustment of expectations is likely to be impeded and the economic cost of reducing inflation is likely to be raised.

The Administration recommended in 1981 that money growth be decelerated in a gradual and predictable pattern. To minimize the disruption to real economic activity and hasten the adjustment of inflation expectations, both the gradual and the predictable elements of that prescription were believed to be important. A gradual move to disinflationary monetary policy allows time for the public to recognize and believe in the new policy and to adjust inflation expectations and behavior accordingly. This gradualism should not only extend the period of adjustment to disinflation, but should also reduce the associated disruption to output and employment growth. A reasonably predictable deceleration of money growth can also provide the public with the assurance of lower inflation needed to reduce inflation expectations. A highly variable path of money growth is more unpredictable and therefore is likely to help maintain and reinforce the uncertainty about future inflation and to retard the adjustment of expectations.

It is difficult to characterize the deceleration of money growth in 1981-82 as either gradual or predictable. The Administration's recommendation assumed a gradual reduction in money growth to 3 percent in 1986. In fact, more than half of the deceleration in money growth that the Administration had envisioned occurring over 6 years occurred during 1981. Moreover, there were two 6-month periods during 1981 and early 1982 when M1 growth was negligible. As a result of the substantial slowdown in monetary growth, inflation probably fell more rapidly than it otherwise would have. However, the abrupt reduction in M1 growth, as well as the protracted periods of very slow money growth, probably contributed to the duration and depth of the 1981-82 recession.

In addition, the variability of M1 growth increased substantially after 1979; the standard deviation of quarterly M1 growth increased from 2.2 percent in the 6-year period preceding October 1979 to 4.8 percent in the 6-year period thereafter. During the seven-quarter period of decelerated money growth that began in 1981, for example, quarterly growth rates of M1 ranged from 3 to 9.2 percent. This is considerably more variability in M1 growth than can be attributed to technical limitations of monetary control.

In the context of relatively stable prices, such monetary volatility might not be particularly important. But in the early 1980s a major challenge facing policymakers was to restore policy credibility. In that environment, each reacceleration of money growth helped raise anew the fear that disinflationary policy was not permanent and thereby helped maintain and reinforce inflationary expectations even as the actual inflation rate fell dramatically.

Uncertainty about future inflation may also have been exacerbated by the emergence of large budget deficits. Large current and prospective budget deficits may raise the perceived probability that the Federal Reserve will eventually increase money growth and thereby generate higher inflation that would ease the burden of accumulated debt. Concerns about the budget deficit therefore may have interacted with the uncertainty caused by volatile money growth and may have impeded the downward adjustment of inflation expectations.

Thus a number of factors may have effectively raised the cost of reducing inflation during the early 1980s. First, the abrupt and unanticipated deceleration of money growth in 1980–82 probably contributed to a more severe and prolonged recession in 1981–82 than would likely have occurred if a more gradual and predictable deceleration had occurred. Second, the sluggish adjustment of inflation expectations kept nominal interest rates high relative to the actual inflation rate. Moreover, the public's reluctance to revise its expectations of inflation is probably related to the volatile and unpredictable nature of monetary policy, to large budget deficits and the fear that they will be monetized, and to the memory of failed attempts to reduce inflation during the 1970s.

THE EXPANSION TO DATE

The current expansion that began in November 1982 marks an important departure from the pattern of persistently rising inflation rates, interest rates, and unemployment rates that characterized earlier expansions since the rise of general inflation began in the late 1960s. This expansion has been accompanied by a significant decline in inflation relative to historical experience. What is particularly unusual compared with the average postwar expansion is that the inflation rate has continued to decelerate during the third year of this expansion. The four-quarter change in the implicit GNP price deflator was lower in the fourth quarter of 1985 than at any other time in this expansion. For every other postwar expansion the GNP deflator began to accelerate by this stage of the expansion; on average a substantial reacceleration of inflation had been evident by the third year of the expansion.[1] There is some evidence that the secular rise of interest rates described above may have been broken in this expansion. During 1985 the monthly levels of most short- and long-term interest rates fell below their cyclical lows reached in mid-1980. After rising in 1983 and early 1984, rates declined and at year-end 1985 were below the levels that existed when the expansion began. Interest rates are 5 to 10 percentage points below their peaks in late 1981; in comparison with other postwar expansions, this is by far the largest decline in interest rates that has occurred 3 years into an expansion. In addition, total employment has increased by 9.1 million over the past 3 years. The decline in the unemployment rate in this expansion is the largest decline in any 3-year period since the expansion that began in 1949.

There are other ways in which this expansion has been unusual. The growth of capital investment has been the strongest in the postwar period. The substantial appreciation of the U.S. dollar and the strong growth in the United States relative to the rest of the world have contributed to an unprecedented trade deficit and capital inflow. Contrary to most historical experience around the world, large and persistent trade deficits have coexisted with a strong and, until 1985, appreciating exchange rate. The trade deficit, capital inflow, and relatively strong dollar all appear to be symptomatic of renewed worldwide confidence in the U.S. economy and reflect the availability of relatively attractive investment opportunities in the United States. Some have argued that the trade deficit is evidence of a "two-tiered" economy, with the United States concentrating on production of services and importing goods. Another unusual aspect of this expansion is the large deviation from trend of the growth of velocity, the relationship between the money supply and nominal GNP. With nearly flat velocity over the past 3 years, M1 growth has been very rapid during this expansion, but inflation has remained relatively subdued. Moreover, based on historical relations, the money growth that occurred in late 1984 and 1985 would have been expected to induce a more significant rebound in real growth than has yet occurred. These developments are discussed in greater detail below.

CHARACTERISTICS OF THE EXPANSION

In aggregate terms the current expansion resembles other postwar expansions, but its sectoral and temporal patterns differ from previous experience. Table 1-2 shows growth rates for GNP and various components for the entire expansion, as well as its first and latest six quarters. It also reports growth rates for other selected macroeconomic variables.

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[1] Throughout this discussion the "average" expansion is defined as the average of post-World War II expansions excluding those beginning in the fourth quarter of 1945, the fourth quarter of 1949, the second quarter of 1958, and the third quarter of 1980. The 1945 and 1949 recoveries are excluded because of distortions relating to the transition from World War II and to the Korean war, respectively; the 1958 and 1980 expansions lasted 2 years or less.

TABLE 1-2.—*Growth rates of real GNP components, current expansion and average of previous expansions*

[Average annual percent change, except as noted]

Item	First 3 years of expansion		First six quarters of expansion		Second six quarters of expansion	
	Current[1]	Average[2]	Current[1]	Average[2]	Current[1]	Average[2]
REAL GNP[3]	4.5	4.5	6.9	5.2	2.1	3.8
Final sales[4]	3.8	3.9	4.3	4.1	3.4	3.7
Personal consumption expenditures	3.9	4.3	5.2	5.1	2.5	3.4
Gross private domestic investment	17.4	10.6	38.0	15.7	−.1	6.0
Nonresidential fixed investment	11.3	6.4	13.6	6.0	9.0	6.9
Structures	6.8	3.0	4.9	2.6	8.7	3.5
Producers' durable equipment	14.0	8.8	19.1	8.9	9.1	9.1
Residential fixed investment	15.1	9.3	29.2	15.0	2.6	4.2
Exports of goods and services	2.4	8.8	6.0	4.6	−1.1	13.2
Imports of goods and services	14.6	8.6	25.7	10.4	4.5	7.0
Government purchases of goods and services	4.0	1.1	1.7	.5	6.3	1.8
Federal	5.9	−1.1	1.2	−1.2	10.8	−.9
State and local	2.4	3.7	2.1	3.1	2.7	4.2
Change in inventory accumulation (billions of 1982 dollars)	59.4	36.6	125.3	30.7	−65.9	5.9
ADDENDA:						
GNP implicit price deflator	3.6	4.5	3.8	4.2	3.4	4.7
Employment including resident Armed Forces[5]	8.8	7.6	5.9	3.8	2.8	3.6
Industrial production	7.6	7.3	13.4	9.3	2.0	5.3
Corporate Aaa bond yields (Moody's)[6]	−1.30	.12	1.34	−.14	−2.64	.26

[1] Calculated from 1982 IV, the most recent recession trough.
[2] Average of expansions that began in 1954 II, 1961 I, 1970 IV, and 1975 I.
[3] Real GNP and its components are in 1982 dollars.
[4] GNP less change in business inventories.
[5] Absolute percent change.
[6] Absolute change.

Note.—For current expansion, change for first 3 years and second six quarters based on preliminary data for 1985 IV.

Sources: Department of Commerce (Bureau of Economic Analysis), Department of Labor (Bureau of Labor Statistics), Board of Governors of the Federal Reserve System, and Moody's Investors Service.

Over the 3 years of this expansion, aggregate measures of economic activity such as real GNP, real final sales, and industrial production all increased at rates similar to those registered in the typical postwar expansion. The temporal pattern of this expansion, however, differs from the average expansion. Growth rates of both real GNP and industrial production were significantly stronger in the first six quarters and subsequently have moderated. This is explained partly by the behavior of inventory accumulation that helped boost real growth early in the expansion, but reduced growth as inventories were depleted in the more moderate second phase of the expansion. While inventory drawdown has reduced GNP growth in recent quarters, current low inventory-sales ratios suggest that no important inventory imbalances exist at this stage of the expansion.

The growth of personal consumption expenditures was below that of the average postwar expansion, particularly in the second six quarters of the expansion. Growth of government spending was somewhat higher than in previous expansions, but this growth has been concentrated in the latter six quarters of the current expansion when the overall growth rate was moderating. Thus, it does not appear that this expansion has been driven by especially strong growth of either consumer or government spending.

The sector that has uniformly outperformed average historical experience is gross private domestic investment. Despite high real interest rates and concern about crowding out of domestic investment by the Federal deficit, above-average growth was recorded for all major categories of private domestic fixed investment and was particularly prominent for real nonresidential fixed investment. From the recession trough through the fourth quarter of 1985, real nonresidential fixed investment increased 11.3 percent per year, compared with 6.4 percent in the average postwar expansion. The growth of real nonresidential fixed investment in this expansion has been more than twice that of consumption or real GNP. Both producers' durable equipment and structures have advanced at rates above normal for comparable expansions. As a consequence, the ratio of real nonresidential fixed investment to GNP has risen to a postwar high of 13.5 percent as of the fourth quarter of 1985. Nonresidential fixed investment has contributed nearly twice as much to real GNP growth in this expansion as in the average postwar expansion. While fixed investment has continued to grow rapidly during the second six quarters of this expansion, there has been a sharp reduction in total investment growth. This is attributable to the decline in inventory accumulation discussed above.

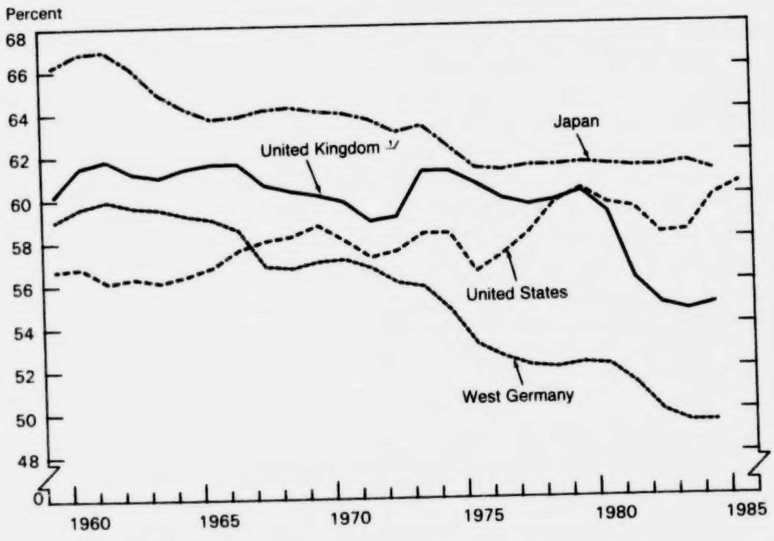
The expansion also compares favorably to recent experience in other industrialized countries. Since 1982, real growth in the United States has been substantially stronger than in every other industrial country except Canada and Japan, where growth rates have been similar to the United States. With relatively strong income growth in the United States, the demand for imports has risen more rapidly than the foreign demand for U.S. exports. This has been reinforced by the appreciation of the dollar and has helped generate a decline in the net export balance. Strong U.S. growth and weak growth in foreign countries have contributed to the increase in the U.S. trade deficit. This is a more appropriate interpretation of cause and effect than the suggestion that the growth of the trade deficit has caused slower real growth in the United States. Thus, an increase in foreign economic growth would reduce the trade deficit and increase U.S. GNP growth. As discussed in Chapter 3, protectionist measures designed to reduce U.S. imports would likely also reduce U.S. GNP growth and might not lead to an improved trade balance.

EMPLOYMENT GROWTH IN THIS EXPANSION

Strong employment growth is an outstanding feature of the current economic expansion. The 9.1 million increase in employment represents an 8.8 percent increase since the trough of the recession, compared with a 7.6 percent increase in the average postwar expansion. As illustrated in Chart 1-2, a higher fraction of the U.S. population is now at work than at any time in the postwar period. The employment-to-population ratio increased by 3 percentage points during the current expansion, and is now at an all-time high of 60.8 percent.

Chart 1-2

Employment-Population Ratio
An International Comparison
(Annual Data)



1/Excludes Northern Ireland.

Note.—For United States, employment as percent of noninstitutional population (both include resident Armed Forces); data relate to persons 16 years of age and over. For other countries, data approximate U.S. concepts.

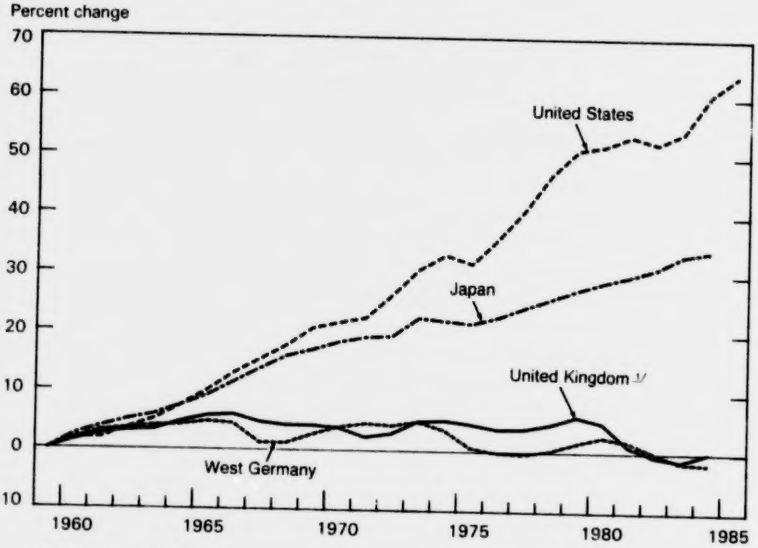
Source: Department of Labor.

This employment performance compares favorably with those of other major industrialized countries. As shown in Chart 1-2, the major European industrial countries as well as Japan employ a smaller percentage of their population today than they did 20 years ago.

Cumulative gains in employment in the United States compared with those for other major countries are presented in Chart 1-3. Over the past 25 years employment has remained stable in West Germany and the United Kingdom, while it has grown moderately in Japan. By contrast, U.S. employment growth has been vigorous, adding more than 40 million workers since 1959. For the 1980-84 period, employment has grown 5.7 percent in the United States, compared with a weighted-average decline of 0.6 percent in other major industrialized countries.

Chart 1-3

Cumulative Change in Employment Since 1959
An International Comparison
(Annual Data)



1/ Excludes Northern Ireland.

Note.—For United States, employment includes resident Armed Forces; data relate to persons 16 years of age and over. For other countries, data approximate U.S. concepts.

Source: Department of Labor.

The total unemployment rate has fallen 3.8 percentage points from 10.6 percent at the trough of the recession, to 6.8 percent in December 1985. This decline in the unemployment rate is nearly double the decline recorded in an average postwar expansion. At the outset of this expansion, however, the unemployment rate was at a postwar high. This reflects the secular rise in the unemployment rate noted earlier as well as the length and severity of the 1981-82 recession. As a result, the unemployment rate remains relatively high by historical standards despite the employment gains recorded in this expansion.

The long-term tendency of the unemployment rate to remain high is partly attributable to increases in the working-age population and in the labor force participation rate. The working-age population has increased substantially as the postwar baby boom generation entered the labor force. Increases in the labor force participation rate are also due to the increased participation of women. The total labor force grew from 71.5 million in 1960 to 117.2 million in 1985. Despite the strength of employment growth, it has not matched labor force growth and the unemployment rate has tended to rise secularly since 1957. In recent months the labor force participation rate has risen to an all-time high of 65.3 percent and the labor force has increased by 5.2 million people during this expansion.

Nominal and real wage rates as well as unit labor costs have all increased at rates below those in the average postwar expansion. Despite the limited growth in wage rates, employment gains have led to sizable gains in total wages; record increases in hours worked per employee have increased real wages per employee.

Labor productivity growth plays an important role in determining real wage rates. So far in this expansion, productivity in the nonfarm business sector has increased at an average annual rate of 1.4 percent and manufacturing productivity has increased at an average annual rate of 4.3 percent. This is considerably below productivity performance in the average postwar expansion. Even with slow productivity growth in this expansion, growth in unit labor costs has been well below average. This reflects the sharp slowdown in wage growth. It appears that the slowdown in output growth during the second half of this expansion has contributed to the slowdown in measured productivity growth. Over the longer run the rapid growth in investment and favorable shifts in the composition of the labor force are expected to lead to higher productivity growth.

THE "TWO-TIERED" ECONOMY

In any expansion, some industries and firms grow more rapidly than others. In this expansion, performance of some particularly visible industries such as steel and leather footwear has been especially weak. Because these industries produce goods, their relatively weak performance has led to concern that the United States is becoming a "two-tiered" economy in which the services sector expands at the expense of the goods-producing sector. Growth of the trade deficit has reinforced this view and raised concern that the U.S. economy will become predominantly a service producer. The performance of specific industries and the trade deficit are discussed in Chapter 3.

Long-term trends show no indication that overall production of goods is becoming less important in the U.S. economy.[2] For the past 25 years, goods production as a share of real GNP has been remarkably stable, fluctuating in a relatively narrow range of 41 to 45 percent of GNP. The share of goods production in GNP in 1985 is above the middle of this range and is higher than it has been in more than a decade. Furthermore, there is no indication that this secular pattern of goods production has been altered during this expansion.

Table 1-3 compares growth in goods- and service-producing sectors for the first 3 years of postwar expansions. Relative to real GNP growth, goods production has expanded more rapidly and service production has grown more slowly during the current expansion than in any other postwar expansion. These data demonstrate that the growth of U.S. demand has been sufficient during the current expansion to generate a substantial increase in the production of both goods and services.

TABLE 1-3.—*Output and employment growth, current and previous expansions*

[Absolute percent change 3 years from trough]

First 3 years of expansions beginning	Real GNP by type of product			Nonagricultural payroll employment by type of industry		
	Goods	Services	Total GNP[1]	Goods-producing	Service-producing	Total
1954 II	11.6	11.2	10.8	7.0	9.4	8.4
1961 I	17.4	15.5	16.6	5.8	8.7	7.6
1970 IV	17.6	12.0	14.5	10.3	10.5	10.4
1975 I	15.9	11.0	14.3	9.0	11.2	10.5
AVERAGE OF ABOVE	15.6	12.4	14.0	8.0	9.9	9.2
1982 IV[2]	19.0	6.4	14.1	9.2	12.1	11.3

[1] Total GNP includes structures, not shown separately.
[2] Based on preliminary data for 1985 IV.

Sources: Department of Commerce (Bureau of Economic Analysis) and Department of Labor (Bureau of Labor Statistics).

Further, if the United States were becoming a two-tiered economy, a change in the historical relationship between real GNP (which measures production of goods and services) and industrial production (which is composed of goods) would be apparent. This relationship, however, does not reveal any weakening of industrial production growth relative to real GNP growth during this expansion.

Inferences about the relative decline in the goods sector are often based on the fact that employment in goods-producing industries as a share of total employment is falling. However, this is not a phenomenon peculiar to this expansion. As shown in Chart 1-4, the share of employment devoted to goods production has trended downward for the past 30 years, while the service-producing employment share has steadily increased. Neither of these trends appears to have changed during this expansion or the preceding recession. The coexistence of a declining share of goods-producing employment and a relatively constant share of goods production in GNP is evidence of relatively rapid productivity growth in the goods-producing sector, not a decline in output growth.

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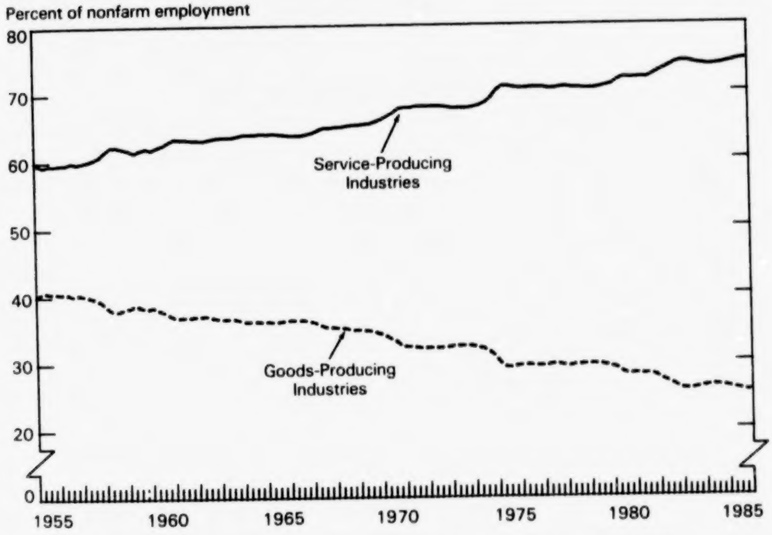
[2] The qualitative conclusions drawn from this analysis are the same whether the analysis is based on goods production or industrial production.

Chart 1-4

Employment Shares—Goods-Producing and Service-Producing Industries



Note.—Data relate to all employees on nonfarm payrolls (establishment data), seasonally adjusted.
Source: Department of Labor.

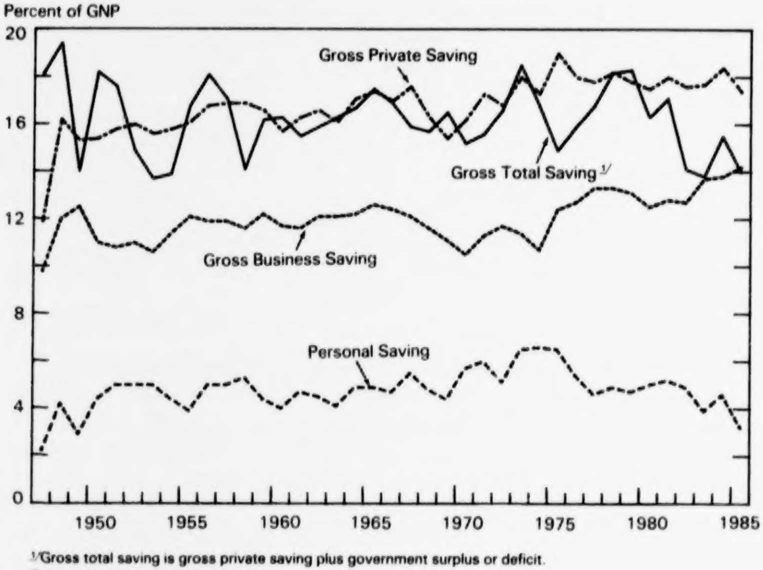
The comparison of employment growth contained in Table 1-3 shows that employment in goods-producing industries has grown more during the current expansion than in all but one of the other postwar expansions examined, and is above the average performance of these four previous cycles. Aggregate employment growth in this expansion has been sufficient to yield substantial employment gains in both the goods-producing and services sectors.

Saving and Investment

Aggregate saving provides the financing for business investment, housing, government deficits, and other lending. A lower saving rate, other things being equal, implies that fewer funds are available for capital formation. Chart 1-5 shows various components of saving represented relative to nominal GNP. Personal saving as a share of GNP has drifted downward since the mid-1970s and remains low relative to its historical norm. However, business saving as a share of GNP has increased since 1974, and this has offset the relative decline in personal saving. As a consequence, gross private saving (personal saving plus business saving) as a share of GNP is approximately at the 1970s level and is above the level achieved during most of the 1950s and 1960s.

Chart 1-5

Saving Measures as Percent of GNP



[1] Gross total saving is gross private saving plus government surplus or deficit.
Source: Department of Commerce.

What is relevant for inferences about the impact of saving on investment is the total amount of saving. In terms of funds available for borrowing, it makes no difference whether the funds originate from the household, business, or government sector. In addition, the

U.S. financial markets are part of an increasingly well-integrated world capital market. To the extent that investment opportunities are more profitable here than in the rest of the world, saving will be attracted to the United States to finance investment.

Gross total saving is private saving plus government saving (government saving is negative when governments run a deficit). As is illustrated in Chart 1-5, gross total saving relative to GNP has drifted downward since 1979. In recent years this is attributable in an arithmetic sense to the size of total government budget deficits. Despite large government deficits, it is important to note that the level of gross total domestic saving relative to GNP in recent years is not an unprecedented low for the postwar period. Nonetheless, it is a legitimate matter of concern that total domestic saving is relatively low. The absorption of saving by persistent budget deficits is detrimental to long-term capital formation.

In addition, the relative price of investment goods (as measured by the ratio of the price deflator for nonresidential fixed investment to the GNP deflator) has declined 11 percent since the fourth quarter of 1982. This means that a given nominal amount of saving translates into higher real investment because real saving—in terms of the investment that can be financed—is higher than is indicated by nominal saving as a share of GNP. In fact, private saving was 102 percent of total U.S. investment as of third quarter 1985.

Personal Saving and Consumer Debt

Low personal saving may also be of concern in conjunction with record levels of consumer indebtedness. Outstanding household debt as a share of disposable personal income reached a record high of 82 percent in the third quarter of 1985. With high household indebtedness and a low saving rate, some analysts have suggested that consumers might curtail consumption in order to reduce indebtedness. This raises concern that an economic slowdown could result from reduced consumer spending. However, other factors are relevant to the recent trends in saving and indebtedness.

First, while the ratio of debt to income has risen, the ratio of assets to income has risen faster. The ratio of household debt to liquid assets has fallen from a postwar peak of 69 percent in 1979 to 65 percent in the third quarter of 1985. As long as the asset position of households is strong, the servicing of debt should not be a problem.

Second, real household net worth, the difference between household assets and household debt, has increased 6.2 percent during this expansion. Increased household wealth, along with high real interest rates, may be related to the low personal saving rate. If households save to accumulate funds to finance a given amount of future consumption, then an increase in the market value of current asset holdings reduces required saving relative to current income. Recent declines in private sector employer contributions to defined-benefit pension plans may reflect this effect. Increases in the market value of pension fund assets reduce required employer contributions. Because these contributions are included in personal income, the result is an observed decline in the personal saving rate even though savers' claims to future pension benefits are unchanged.

Demographic shifts may have also played a role in the decline in the personal saving rate. The proportion of the population between the ages of 25 and 44 has grown continuously since 1970. Because this age group typically saves relatively less and borrows relatively more, its higher representation in the population may contribute to a lower overall saving rate and higher consumer indebtedness. In addition, the over-65 age bracket has also grown since 1970. Because retired people tend to save less, this development also would be expected to reduce the personal saving rate.

REAL INVESTMENT AND GROWTH IN THIS EXPANSION

Real gross business fixed investment has grown much more rapidly during this expansion than it has in the average postwar expansion. Although it slowed in 1985 from its 1984 pace, real gross business fixed investment grew faster than real GNP in 1985 and for the second consecutive year reached a postwar high as a share of real GNP. However, real net business fixed investment as a share of real net national product has not reached a postwar high. The slower growth in net investment relative to gross investment is partly due to the direction of investment toward relatively shorter lived assets. The shortening of new investment lives is not necessarily undesirable, at least to the extent that it implies a more flexible capital stock that is more adaptable to technological change and to relative price changes.

A number of factors have contributed to the boom in gross investment. The robust expansion initially stimulated increased investment demand. The ratio of real investment to real GNP has a predominant cyclical component and moves closely with capacity utilization. When capacity utilization rises because of increased aggregate demand, real business investment generally rises relative to real GNP. The real economy and capacity utilization rose rapidly until mid-1984 and real business investment as a share of real GNP rose as well. Since the third quarter of 1984, real GNP growth has decelerated substantially and capacity utilization has actually fallen while real investment has continued to increase. Thus, the performance of real business investment thus far has exceeded that implied by typical cyclical behavior.

Because cyclical events cannot explain the continued strength of real investment, other influences must be at work. One important factor has been the dramatic decline in the relative price of investment goods. After rising somewhat faster than the general price level since the mid-1970s, investment goods prices have exhibited essentially no growth since the end of 1982 while the general price level has increased more than 11 percent.

More importantly, the tax changes in 1981 significantly improved the tax environment for business investment. During the 1970s the rise in inflation and existing depreciation schedules made depreciation allowances increasingly inadequate to cover the cost of replacement investment goods. That is, with the existing tax code, accelerating inflation raised the effective tax rate on income from investment in business plant and equipment. The net effect of tax law changes since 1981 has been shorter tax lives of many assets, more accelerated depreciation, and an expanded investment tax credit. These tax changes interacted with disinflation in the 1980s to reduce the effective tax rate on investment income. As a result, after-tax rates of return on new business investment rose and incentives to invest were enhanced.

The combination of high real interest rates and robust investment growth over the past 3 years may appear paradoxical. They are not. The initial rise in real interest rates was associated with the shift to disinflationary monetary policy. In addition, many have attributed the sustained high levels of real interest rates to the emergence of large Federal budget deficits. As the expansion progressed, however, neither explanation for high real rates was consistent with the strong investment growth that occurred. Either explanation would have involved a crowding out of real investment by high real rates, not the observed investment boom.

An explanation consistent with actual events is that real interest rates both determine and are determined by investment demand. It appears that the tax law changes in 1981 interacted with the decline in inflation to raise the internal rate of return on capital investment. As a result, more investment projects became profitable. To finance these projects, firms willingly bid up the real rate of interest in financial markets. Thus, a portion of the observed, historically high real interest rates reflects an increase in the underlying after-tax real return on plant and equipment.

As much as 20 to 25 percent of the rise in real business fixed investment during the period 1982–84 has been attributed to tax law changes. Thus, while other influences are clearly at work, tax changes have also played a critical role in the investment boom of this expansion. Furthermore, to the extent that tax changes have stimulated investment demand, they may also have had an effect on the level of real interest rates.

U.S. DOMESTIC INVESTMENT AND FOREIGN CAPITAL INFLOWS

Unprecedented net flows of foreign capital into the United States have accompanied the investment boom in this expansion. The counterpart of a net capital inflow is a current account deficit. The U.S. current account deficit has risen from $8 billion in 1982 to an annual rate of $110 billion during the first three quarters of 1985. This increase in net capital inflows has played an important role in financing the rapid investment growth in the presence of a large government deficit.

The capital account measures increases in foreigners' claims on U.S. residents (capital inflows) versus increases in U.S. claims on foreigners (capital outflows). Thus, a capital account surplus means that foreigners' claims on U.S. residents have risen relative to U.S. claims on foreigners. Traditionally, capital account surpluses or deficits have been viewed as passively adjusting to finance current account deficits or surpluses. Consequently, the relative demands for and supplies of goods and services across countries have been considered the major determinants of current account balances. Capital flows, however, should not be thought of as passively financing an independently determined current account balance. Rather, the desired capital account balance, determined by investors' efforts to earn the highest available risk-adjusted return, exerts an independent force on the payments balance. The current account adjusts to reflect the consequent net capital flows. This adjustment of the current account occurs primarily through changes in exchange rates, relative prices, and income levels at home and abroad.

Domestic investment is financed by private domestic saving and total government saving as well as net capital inflow from abroad. The links between these variables are summarized by the accounting identity:

$$\text{Private Saving} + \text{Government Saving} = \text{Domestic Investment} + \text{Net Foreign Investment},$$

where net foreign investment is the net accumulation of foreign assets by domestic residents. It corresponds to both a current account surplus and a net outflow of capital. Government saving is negative when the government runs a deficit, and net foreign investment is negative when the current account is in deficit. A necessary implication of this accounting identity is that when total domestic investment exceeds total domestic saving, the current account is in deficit and foreign capital flows into the United States and conversely. Furthermore, an increase in the government budget deficit, with constant private saving and constant domestic investment, necessarily implies a worsening of the current account balance. A government budget deficit, however, is neither necessary nor sufficient for a current account deficit. A current account deficit could coexist with a budget surplus if domestic investment exceeded the sum of private saving and the budget surplus and conversely. Hence, to understand the relationship between budget deficits and the current account balance, it is necessary to take account of how economic forces affect private saving and domestic investment. Table 1–4 provides the data relevant to understanding these relationships.

When domestic investment was at a cyclical low in 1975, total domestic saving exceeded domestic investment and the current account was in surplus. This occurred despite a total government deficit in 1975 that, as a share of GNP, was larger than that in 1982 or 1985. As the economy expanded after 1975, domestic investment rose and the total government deficit fell as a share of GNP. By 1978 the total government budget was essentially balanced, but the current account balance, as a share of GNP, had deteriorated by about 2 percentage points. Foreign capital flowed into the United States as domestic investment expanded and outpaced domestic savings.

Table 1–4.—*Saving, investment, government deficit, and current account balance as percent of GNP, 1972–85*

[Percent of GNP]

Year	Government saving		Gross private saving	Gross private domestic investment	Current account balance
	Federal and State and local	Federal			
1972	−0.3	−1.4	16.8	16.7	−0.5
1973	.6	−.4	18.0	17.6	.5
1974	−.3	−.8	17.3	16.3	.1
1975	−4.1	−4.3	19.0	13.7	1.1
1976	−2.2	−3.0	18.0	15.6	.2
1977	−1.0	−2.3	17.8	17.3	−.7
1978	−.0	−1.3	18.2	18.5	−.7
1979	.5	−.6	17.8	18.1	−.0
1980	−1.3	−2.2	17.5	16.0	.1
1981	−1.0	−2.1	18.0	16.9	.2
1982	−3.5	−4.6	17.6	14.1	−.3
1983	−3.8	−5.3	17.7	14.8	−1.4
1984	−2.9	−4.6	18.4	17.9	−2.8
1985[1]	−3.3	−4.8	17.5	16.8	−2.8

[1] Average for first three quarters.

Source: Department of Commerce, Bureau of Economic Analysis.

The situation in 1982 was similar to that in 1975. Both the Federal and the total government deficits were approximately the same share of GNP. Because domestic investment was at a cyclical low in 1982 and the excess of private domestic saving over domestic investment was nearly sufficient to finance the government budget deficit, the current account deficit was negligible.

Although more pronounced, the cyclical rebound of domestic investment from 1982 to 1985 was similar to that from 1975 to 1978. Contrary to the 1975–78 experience, however, the government deficit hardly receded at all. With the rise in domestic investment accompanied by a relatively constant government deficit as a share of GNP, private saving was insufficient to satisfy all domestic demand for credit. Consequently, foreign capital flowed in to finance the excess of the government deficit plus domestic investment over private saving. A current account deficit was the counterpart of this capital inflow.

The Role of the Dollar

The real appreciation of the U.S. dollar in foreign exchange markets since 1980 is widely believed to have played a key role in generating the current account deficit necessarily implied by the combination of the budget deficit and the levels of private saving and domestic investment. Increases in the real value of the dollar were initially associated with the actual and perceived shift to a tighter monetary policy in the United States and the attendant effects of this policy shift on nominal and real interest rates. As the recovery began in late 1982, however, the persistence of high U.S. real interest rates and a strong dollar were most likely due primarily to rapid real growth in the United States relative to that in the rest of the world. The robust expansion, low inflation, and business tax cuts all improved the after-tax real return to new business investment and raised the return on dollar-denominated assets in general, making the United States more attractive to investors worldwide. The increased demand for dollar-denominated assets bid up the real foreign exchange value of the dollar. As a result, the current account balance has deteriorated sufficiently to enable a net capital inflow to finance the excess of U.S. domestic investment over domestic saving.

Events other than the rise in the dollar have also contributed to the increased current account deficit. Because the U.S. expansion has been strong relative to those of other industrialized countries, U.S. demand for imports has grown more rapidly than foreign demand for U.S. exports. This real growth differential alone would have worsened the U.S. current account balance. In addition, efforts of developing countries to reduce imports in order to limit their external borrowing requirements has reduced demand for U.S. exports.

Resolving External Imbalances

Because an excess of investment over saving in the United States necessarily implies an excess of saving over investment in the rest of the world, the U.S. current account deficit is a product of macroeconomic policies and conditions abroad as well as in the United States.

The Group of Five Agreement in September 1985 was an important recognition that policy changes across countries, not just in the United States, are essential to correct external imbalances. Specifically, the Ministers of Finance and Central Bank Governors of France, West Germany, Japan, the United Kingdom, and the United States agreed that policies designed to achieve increased convergence of economic performance, especially sustained, noninflationary growth, were the responsibility of all of the participants. Hence, the United States reaffirmed its commitment to decrease the Federal Government's claim on domestic saving by reducing government spending as a share of GNP. The remaining four countries committed themselves to policies that promote internally generated economic growth, thereby providing increased demand for their own output as well as for U.S. and LDC exports. While the Ministers and Governors noted and agreed that a realignment of exchange rates should play a role in redressing external imbalances, such a realignment cannot be sustained unless policies are pursued to generate more balanced economic growth.

It is important to note that intervention in foreign exchange markets to force down the value of the dollar is not an appropriate long-term strategy to resolve external imbalances. Intervention that does not affect domestic money supplies has little if any long-run effect on nominal or real exchange rates. Intervention that does affect domestic money supplies is tantamount to conducting domestic monetary policy in foreign exchange markets. Such intervention can affect the long-run behavior of nominal exchange rates, and perhaps also the shorter run behavior of real exchange rates. However, commitment of monetary policy to the control of exchange rate movements interferes with its use for other important policy objectives—most importantly maintenance of price stability and avoidance of money-induced fluctuations in economic activity. The Group of Five's policy initiatives recognize these limitations of foreign exchange market intervention, and place appropriate emphasis on correcting investment and saving imbalances and divergent real growth rates as the means for resolving external payments imbalances.

Can the Current Situation Persist?

Whether, and for how long, the U.S. current account deficit can persist depends on foreign and domestic saving and investment decisions and on the macroeconomic policies that affect those decisions. Labor forces have been growing relatively more slowly in Japan and Western Europe than in the United States. Consequently, these countries require less investment than the United States to equip new members of the labor force with physical capital. Higher tax rates on capital and structural rigidities make investment in both Japan and most of Western Europe less attractive. Furthermore, the average age of the populations of Western Europe and Japan is rising more rapidly than in the United States. Consequently, these countries require higher saving rates to finance future retirement benefits. These conditions suggest that investment may continue to exceed saving in the United States while saving may continue to outpace investment in Japan and Western Europe. Consequently, a continued net inflow of foreign capital into the United States can be expected.

As a result of persistent current account deficits for the past 4 years, the stock of U.S. assets held by foreigners now exceeds the stock of foreign assets held by U.S. residents. With this net debtor position currently expanding by more than $100 billion per year, the U.S. situation has been termed a pending debt crisis similar to those experienced by some LDC debtors. However, there is little similarity between the positions of LDC debtors and that of the United States.

The foreign debt of LDCs is primarily government debt denominated in foreign currencies, while U.S. foreign debt is denominated mostly in dollars and is broadly diversified across public and private assets. Moreover, the United States has become a net debtor primarily because funds, especially those of U.S. banks, that used to flow abroad are now being invested in the United States. Finally, the extent to which the servicing of this debt becomes a future burden depends on whether the capital inflows are used productively to generate the future income needed to service the debt. With U.S. fixed real investment as a share of GNP at an all-time high, it does not appear that the capital inflow into the United States is being squandered.

RECENT BEHAVIOR OF VELOCITY

One of the unusual aspects of this recovery has been the behavior of velocity and the uncertainty it has generated about the meaning of money growth. The trend growth of velocity from 1959 to the last business cycle peak in 1981 has been 3.3 percent per year. In contrast, velocity has declined slightly during this expansion. Velocity has typically exhibited sizable fluctuations in the short run, but recent deviations of velocity growth from trend have been large and persistent by comparison with postwar experience.

Growth of M1 has been very strong in this expansion, yet the rise of inflation that would be inferred from the historical relationship between M1 growth and inflation has not occurred. Over the 12 quarters of this expansion, M1 growth has been about 9 percent and has exceeded the rates associated with the rise in inflation in the 1970s. In addition, M1 growth was more than 11 percent in 1985, but the rebound in the real economy recorded through the fourth quarter has not been as strong as would be expected from the historical relationship between short-term changes in money growth and economic activity.

There are several competing explanations for this below-trend growth of velocity. Because a change in money growth affects economic activity with a lag and velocity is the ratio of nominal GNP to M1, part of the unusual fluctuations in velocity in recent years is related to increased volatility of money growth. While this may contribute to abnormal velocity behavior in the short run, monetary volatility does not explain the longer lived declines in velocity growth observed since 1982.

Some analysts relate the behavior of velocity in this expansion to inventory swings and to the increase in the trade deficit. A larger trade deficit may depress velocity because a larger share of the domestic spending facilitated by money growth is satisfied by imports and does not show up in GNP. By the same reasoning, relatively large swings in inventories might account for more volatile velocity behavior as domestic spending translates into changes in inventory accumulation rather than into production. There is, however, little difference over the past 5 years between the behavior of the conventional measure of velocity and a measure that accounts for changes in inventories and in the trade deficit. Hence, neither appears to be a major factor contributing to the prolonged period of abnormal velocity behavior.

The deregulation of deposits at financial institutions can have both transitory and permanent effects on velocity growth. The introduction of new types of deposit accounts can induce shifts of funds among various monetary aggregates that can affect observed money and velocity growth. But once completed these deposit shifts have no lasting effect on money or velocity growth. A permanent change in velocity growth may have been caused by the inclusion in M1 of interest-bearing checking accounts, which function partially as savings balances. As a result, the public's desire to hold M1 balances as either income or interest rates change may have been altered. The saving element in M1 may induce the public to build up M1 balances more rapidly as income rises; this would reduce the trend growth of velocity.

In addition, it is possible that the inclusion of interest-bearing deposits in M1 has altered the interest-elasticity of the demand for M1 balances. Because some M1 assets now pay interest, M1 balances may grow more rapidly and velocity more slowly if market interest rates fall relative to those paid on M1 deposits. The declines in velocity in early 1985 may be attributable to the decline in interest rates over the same period. However, velocity continued to fall and M1 growth continued in double digits after interest rates stopped falling in June.

Disinflation has likely also contributed to abnormally low velocity growth. The secular rise in inflation and interest rates over the past few decades has probably contributed to the positive trend growth of velocity over that period. The decline in inflation after 1981 and the downward adjustment of both interest rates and inflation expectations may have been substantial enough to induce a realignment of velocity behavior. Some empirical evidence suggests that in the United States the decline in velocity in 1982–83 was related to falling inflation and interest rates, rather than to financial deregulation. Moreover, since 1981 most industrialized countries have experienced slower than normal velocity behavior, even though the substantial financial deregulation that occurred in the United States did not generally occur elsewhere. A common factor in all these countries is the decline in inflation and interest rates.

There is not now sufficient information to determine the nature and precise extent of any permanent change in velocity behavior. Nevertheless, it is difficult to see any evidence that would justify over the long run the money growth that occurred in 1985. Even if velocity remained constant rather than resuming its positive trend growth, 12 percent money growth combined with 4 percent annual real growth would imply 8 percent inflation over the long run. If velocity were to return to a positive trend, such money growth would imply an even higher long-term inflation rate.

Federal Reserve Policies Since 1982

The record of monetary policy actions and statements by Federal Reserve officials indicate that, in the absence of evidence of any significant reacceleration of inflation, the Federal Reserve has reacted to the uncertainty about velocity behavior by focusing attention on real economic activity. Based either on the path of interest rates or M1 growth, it is possible to discern three periods of different monetary policy since the period of restrained money growth in 1981–82.

The first began in the fall of 1982 when monetary policy turned more expansionary. At the time, inflation was falling rapidly, while the economy remained in a deep recession and some LDCs were experiencing difficulties servicing their external debt. In this environment, the Federal Reserve moved to a substantially more expansionary monetary policy. Simultaneously, the Federal Reserve effectively reversed the change in operating procedures adopted in October 1979 and deemphasized the role of M1 as a primary target variable. The introduction of new types of deposits caused considerable uncertainty about the meaning of the monetary aggregates in late 1982 and early 1983. In the face of this uncertainty, the Federal Reserve allowed M1 to grow at double-digit rates in the fourth quarter of 1982 and over the first half of 1983. The strength of the economic recovery in 1983 and early 1984 suggests that the Federal Reserve provided considerable monetary stimulus to the economy.

A period of substantially slower money growth began in mid-1983 as strong economic growth continued and the Federal Reserve apparently became more concerned about rapid money growth. Interest rates were allowed to rise in the late spring and M1 growth slowed substantially during the second half of 1983. As both nominal and real GNP expanded at a rapid rate in the first half of 1984, Federal Reserve officials became concerned that the expansion was overheating and would generate inflationary pressures. Interest rates rose again in the spring and M1 growth slowed further in the second half of 1984. M1 was consistently within its target range during 1984, but the substantial deceleration of money growth from 1983 to 1984 contributed to the slowdown in real economic activity after mid-1984.

The third period began late in 1984 as interest rates fell and money growth was accelerated and remained high throughout 1985. By June 1985 M1 was growing at a compound annual rate of nearly 12 percent and had risen well above its 4 to 7 percent target range. In July the Federal Reserve defined a new target range, 3 to 8 percent, and rebased the new target range to the second-quarter level of M1, incorporating nearly $14 billion into the targeted level of M1. During the second half of the year, M1 growth averaged more than 11 percent and was consistently above the new target range. This more expansionary monetary policy coincided with a period of slower real economic growth and still moderate inflation. The short-term result of this combination of expansionary monetary policy with relatively slower growth of nominal GNP was an actual decline in velocity during 1985.

Thus, over the past 3 years, each of the major shifts in monetary policy appears to be a reaction to contemporaneous economic activity. In 1982–83 and 1985 monetary policy turned expansionary following periods of falling real growth. In both instances that concern was reinforced by international concerns. In both mid-1983 and 1984 the slowdown in money growth followed periods of strong real growth. These policy moves are consistent with the view that with a continued moderate inflation rate, real growth has been the primary target of monetary policy.

POLICY PRINCIPLES AND ASSUMPTIONS

The President initiated an economic program in 1981 based on the belief that government policies can best foster economic prosperity and progress by allowing the private market system to function as freely as possible. Economic efficiency is maximized if inputs into the production process are put to their most productive uses. This is most likely to occur if market forces are left free to direct resources and the government does not interfere with the process. Moreover, the maintenance of a flexible relative price system promotes an adaptable macroeconomy that can adjust to unforeseen events in a timely and orderly way. Within this market-oriented framework, the task for macroeconomic policy is to provide a stable environment in which the market system can function freely.

One element of that environment is price stability. By controlling the rate of money growth, the Federal Reserve can control the price level over the long run. In the context of a long-run goal of restoring and maintaining price stability, the Administration has consistently recommended that the Federal Reserve provide a reasonably stable and predictable path of money growth in order to avoid the fluctuations in real economic activity that are typically associated with sharp swings in money growth. The Administration's outlook for 1986 and its long-term economic assumptions and goals that are presented below are conditional on a monetary policy that achieves a gradual reduction of monetary growth and ultimately restores price stability.

Little evidence supports the efficacy of either monetary or fiscal policy for short-term fine-tuning of the macroeconomy. In principle, discretionary, short-term adjustments to emerging economic conditions appear to be a reasonable approach to policymaking. In practice, however, the lags in economic policy, as well as lack of reliable information about the dynamic path of the economy, imply that policy actions designed in response to evolving economic conditions can be destabilizing. In some instances, actions undertaken to fine-tune the economy may turn out to be appropriate; but such policies rely on a high degree of luck to succeed and typically do not minimize the risk to economic performance.

THE OUTLOOK FOR 1986

By the end of 1986, the current expansion will have exceeded the 45-month average length of all previous postwar expansions. Based on the premise that expansions have a natural lifespan, it has been suggested that an economic downturn is increasingly likely. However, historical evidence indicates that the probability of a recession occurring does not rise as an expansion proceeds. Economic conditions or imbalances can emerge that frequently are precursors of a slowdown or downturn in the economy, but none of these is now apparent. A substantial slowdown in inventory accumulation during 1985 left inventory levels very low, so that continued growth in final sales would be expected to trigger production increases. Most interest rates are at their lowest levels in over 6 years and inflation remains low. Money growth has been ample to support continued real growth. Despite substantial gains in employment during this expansion, considerable slack persists in labor markets and excess capacity remains in most industries. The rapid growth of capital investment in this expansion bodes well for future output and productivity growth. Thus, the real output constraints or financial imbalances that frequently precede a recession are not present, and in their absence there is no reason to expect that age itself will bring the expansion to an end.

The Full Employment and Balanced Growth Act of 1978 requires that the *Economic Report of the President*, together with the *Annual Report of the Council of Economic Advisers*, include an investment policy report and a review of progress in achieving the national economic goals specified in the act. Strong business investment, as discussed earlier, has been an important contributor to this expansion. Motivated in part by the Administration's tax changes, real nonresidential investment has contributed nearly twice as much to real GNP growth in this expansion as in previous postwar expansions. Furthermore, increased attractiveness of U.S. investment opportunities has generated a net inflow of foreign capital. Both of these issues are discussed in the preceding part of this chapter. In addition, Federal Government involvement in credit markets and the implications for investment are discussed in Chapter 6.

The Administration's projections for 1986, shown in Table 1-5, anticipate that real business investment will continue to lead the expansion. Real investment is expected to grow more rapidly than real GNP and to reach another postwar high as a share of real GNP in 1986. Residential investment should improve.

The remaining projections contained in the table depict continuing progress toward achieving the goals specified in the act—increased employment, higher real income and productivity growth, and low inflation. From the fourth quarter of 1985 to the fourth quarter of 1986 the Administration expects a 4 percent rise in real GNP. This growth is higher than the 2.5 percent growth of real GNP in 1985 because it reflects continued strong fixed investment plus a rebuilding of real inventories in 1986. Employment in 1986 is expected to increase by 1.7 million, leading to a further decline in the unemployment rate. Following the depreciation of the foreign exchange value of the dollar during most of 1985, real net exports of goods and services are expected to increase; however, the nominal trade deficit will probably show little improvement. With the implementation of the Balanced Budget and Emergency Deficit Control Act of 1985, commonly referred to as the Gramm-Rudman-Hollings Act, Federal Government purchases will decline in 1986. This decline reflects a sharp reduction in projected Federal purchases of agricultural commodities by the fourth quarter of 1986 from the very high level in the fourth quarter of 1985. At the State and local government levels, growth in purchases, financed by continued growth in receipts, is expected to be maintained.

TABLE 1-5.—*Economic outlook for 1986*

Item	1985[1]	1986 forecast
	Percent change, fourth quarter to fourth quarter	
Real gross national product	2.5	4.0
Personal consumption expenditures	2.9	2.6
Nonresidential fixed investment	6.0	5.0
Residential investment	6.4	8.0
Federal purchases of goods and services	11.8	-4.0
State and local purchases of goods and services	2.9	3.5
GNP implicit price deflator	3.2	3.8
Compensation per hour[2]	3.7	5.5
Output per hour[2]	-.1	1.8
	Fourth quarter level	
Unemployment rate (percent)[3]	6.9	6.7
Housing starts (millions of units, annual rate)	1.7	1.9

[1] Preliminary.

[2] Nonfarm business, all persons.

[3] Unemployed as percent of labor force including resident Armed Forces.

Note.—Based on seasonally adjusted data.

Sources: Department of Commerce (Bureau of Economic Analysis and Bureau of the Census), Department of Labor (Bureau of Labor Statistics), and Council of Economic Advisers.

After being lower than expected in 1985, the inflation rate, as measured by the GNP deflator, is expected to rise somewhat in 1986. Rapid monetary growth throughout 1985 as well as the depreciation of the dollar are expected to place upward pressure on prices. The projected rise in near-term inflation, however, is expected to be temporary, provided that a policy of gradual money-growth reduction is pursued. Due to anticipated productivity growth, hourly compensation is expected to rise faster than the rate of inflation. With average hours worked expected to remain steady, real incomes should continue to rise. The expected growth in hourly compensation and in productivity indicates that unit labor costs should rise less than the inflation rate. Consequently, business profits should improve in 1986.

FISCAL POLICY

Fiscal policy is concerned with the level and character of both government spending and taxation. The Administration's goals for fiscal policy are to promote long-term economic growth by limiting the growth of government spending, keeping overall tax rates as low as possible, and enacting appropriate tax reform. These goals are consistent with the evidence that short-term, discretionary changes in fiscal policy are not effective for purposes of short-term macroeconomic stabilization, with the evidence that resources are generally used more efficiently in the private sector, and with the evidence that high and uneven marginal tax rates distort economic incentives and inhibit economic growth.

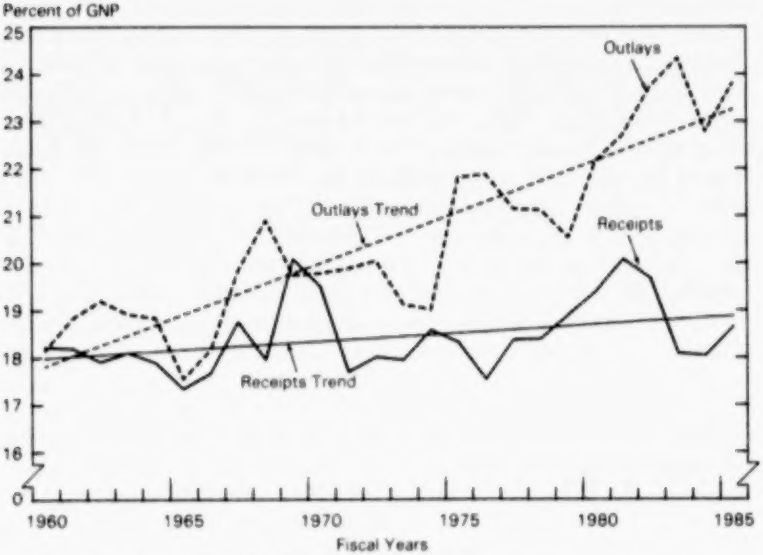
The Federal fiscal deficit is the excess of Federal spending over Federal revenues, and is estimated to be about $200 billion on a current services basis for the 1986 fiscal year. Large and persistent Federal deficits are commonly believed to cause many of the economy's current problems, in particular high interest rates, the strong dollar, and the trade deficit. Evidence linking the fiscal deficit to interest rates, the value of the dollar, or even the trade balance is tenuous.

While the level of government spending rather than the deficit should be the primary focus of policy, large persistent deficits are nonetheless a cause of concern for several reasons. First, deficits may absorb saving that could otherwise be used to finance more productive private economic activity, thereby adversely affecting capital formation and the long-run growth of the economy. While little hard evidence supports the claim that deficits increase interest rates, deficits may have some effect on rates. Existing evidence, however, suggests that this relationship is weak and sensitive to the time period examined as well as to alternative measures of debt, deficits, and interest rates. Second, absent changes in government spending, deficits may shift tax burdens into the future. To the extent that citizens do not fully recognize this postponement of taxes, deficits may conceal the true cost (or reduce the perceived cost) of Federal expenditures. In response to this lower perceived price for government goods, citizen-taxpayers may increase their demand for publicly provided goods and services, thereby promoting more government spending than would otherwise be the case. Third, continuing deficits add to cumulative interest costs, thereby increasing the interest cost burden, or the portion of government spending that must be set aside for interest payments on debt. Fourth, persistent deficits contribute to the fear that the Federal Reserve will monetize the debt, thereby generating higher inflation and interest rates.

It is evident that increased government spending rather than lower revenue is the principal reason why deficits have increased so rapidly. Chart 1-6 illustrates that while government spending as a share of GNP increased to an unprecedented level, the share of tax revenue has generally remained around 19 to 20 percent of GNP. Tax revenues as a share of GNP rose rapidly during the late 1970s, so that the overall effect of the 1981 tax cut has been to return revenue as a share of GNP to approximately its historical norm. Moreover, marginal tax rates were reduced only to levels prevailing in the late 1970s because the income tax cuts were in part offset by bracket creep and scheduled increases in the social security tax. Although no major new domestic spending initiatives have been undertaken, aggregate government spending still has increased in real terms for both defense and nondefense spending categories. This suggests that recent Federal budget deficits are symptomatic not of declining revenues, but of an inability to control the growth of government spending.

Chart 1-6

Federal Outlays and Receipts As a Share of GNP



Note.—Outlays and receipts include on-budget and off-budget items.
Trends estimated over the 1960-85 period.

Sources: Department of Commerce, Office of Management and Budget, and Council of Economic Advisers.

Several factors contribute to government spending growth. One basic force explaining such growth is that the benefits of individual government spending programs are typically concentrated among a relatively small number of beneficiaries whereas the costs of individual programs are widely dispersed among millions of taxpayers. The beneficiaries of government spending programs, including private suppliers of inputs to such spending and government employees who administer such programs, have incentives to support and muster forces for lobbying efforts that may influence the final outcome of spending legislation. Moreover, because benefits are concentrated among a few, beneficiaries can easily join forces with one another to form coalitions endorsing spending programs. On the other hand, voters have little incentive to become informed about particular spending issues or to oppose specific spending projects that individually have little effect on their taxes. Hence, legislators may have little incentive to oppose individual spending projects because their constituents are largely unaware of the importance of doing so. At the same time, they will be under pressure from coalitions of beneficiaries to support increased government spending. Consequently, the incentives in the political process foster increases in government spending. Government spending continues to grow, therefore, not because the private sector fails to provide desired goods and services, but because of weaknesses in the political decisionmaking process.

The recognition that recent increases in the deficit are attributable to rapid increases in government spending, not declines in revenues, has strengthened the Administration's resolve to control government spending. Controlling government spending is a principle aim of fiscal policy, not primarily because of the size of the deficit, but because the real cost of government is the level of government spending. Spending diverts resources from the private sector to the public sector, regardless of whether it is financed by borrowing, taxation, or inflation.

Moreover, as discussed in Chapter 2, some evidence suggests that a high level of government spending tends to retard economic growth. European economies that have larger shares of government and heavier average tax burdens than the United States, Canada, and Japan have also had slower rates of economic growth. The disincentive effects of high tax rates on working, saving, and investing may well have contributed to this result. Also, while the evidence relating to deficits and interest rates is ambiguous, empirical studies have shown a positive and significant relationship between government spending and interest rates. This evidence suggests that it is government spending, regardless of how it is financed, that crowds out private economic activity.

The Gramm-Rudman-Hollings Act provides a mechanism for reducing spending and the deficit and is designed to produce a balanced budget by 1991, but does not guarantee a continued balanced budget thereafter. To institutionalize fiscal restraint, the Administration strongly supports a balanced-budget constitutional amendment with tax limitation. Another important improvement that would contribute to spending control in the budgetary process is the line-item veto. This permits the President to veto individual items in congressional appropriations. In addition, tax reform is essential to reduce the tax code's distortion of relative prices and relative rates of return that have constrained the economy's ability to grow.

Gramm-Rudman-Hollings Act

The Gramm-Rudman-Hollings Act prescribes that Federal budget deficits cannot exceed targets that are gradually reduced until the budget is balanced in 1991. The President may not propose and the Congress may not consider budget resolutions that do not conform to these targets. If the Congress and the President fail to agree on a budget consistent with the deficit targets, a Presidential sequestering order will mandate across-the-board spending reductions in accordance with procedures specified by the act. Under sequestering, deficit targets are attained by reducing the growth of defense and nonexempt, nondefense government spending by an equal amount. Several programs or types of domestic spending are exempt, or partially exempt, from such reductions, including social security and medicaid.

The Administration does not intend to resort to tax increases to balance the budget. Higher tax rates adversely affect incentives to work, save, and invest and therefore are detrimental to both long-run economic growth and the tax base. As a result, tax rate increases may yield less than proportional increases in tax revenues. Moreover, tax increases may lead to further increases in government spending. Tax increases not only may weaken economic activity and thereby trigger automatic increases in government spending, but they also diminish the apparent need to slow the growth of government spending.

In addition, it has been argued that the Gramm-Rudman-Hollings Act may cause a contraction of aggregate demand that induces a slowdown in economic activity. Assuming discretionary tax increases are not used to meet the act's deficit targets, the largest reductions in real Federal spending will occur in fiscal 1987 and 1988. They will amount to only about 0.5 percent and 0.1 percent of GNP respectively. Historically, reductions this small have not been followed by recessions. Given anticipated economic growth, the scheduled reductions would reduce the share of Federal spending in GNP to about 19 percent by 1991. As long as the monetary authority maintains steady, predictable monetary growth, no serious or protracted economic disturbances are expected from reducing the deficit. Moreover, the legislation allows for delays in implementing the deficit reduction should real economic growth fall below 1 percent for two consecutive quarters, or a recession be forecast by the Congressional Budget Office or the Office of Management and Budget.

The longer term macroeconomic effects of the Gramm-Rudman-Hollings Act depend on the extent to which deficits are reduced by spending cuts or tax increases. As suggested above, government spending decreases would contribute to long-term economic growth and would therefore be beneficial. Tax increases, on the other hand, would be detrimental to long-term economic growth.

Tax Reform

The Administration has proposed significant improvements to the current tax code in accord with the following principles. First, marginal tax rates should be reduced for both individuals and corporations as a means of improving productive incentives. The supply of labor, capital, innovation, entrepreneurial skill, as well as market activity, should increase in response to lower marginal tax rates. Second, deductions and loopholes should be curtailed to broaden the tax base. These actions would reduce the incentive to avoid taxes and consequently encourage greater voluntary compliance with the tax laws. They would also make economic productivity, rather than tax consequences, the primary factor in individual and business decisions. Moreover, they would enable tax rates to be lowered without a loss of tax revenue. Third, the tax code should be simplified. Resources would be saved if taxpayers could comply with, and tax collectors could administer, the tax code more easily. Fourth, tax reform should promote a tax code that is equitable. The President's proposals address the concerns of families as well as the working poor by increasing the personal exemption and the zero bracket amount. This could virtually eliminate taxation of families with incomes below the poverty level. Tax reform should also provide for similar treatment of taxpayers with the same incomes (horizontal equity), rather than imposing differential tax rates on individuals with similar incomes, as is currently the case.

MONETARY POLICY

Uncertainty about M1 velocity behavior in recent years has made the formulation of monetary policy more difficult. Many observers have asserted that abnormal velocity behavior means that M1 is no longer a useful target for monetary policy. There is, however, no reason to believe that velocity behavior will not return to a reliable pattern. While the trend growth of velocity and its interest elasticity may have been permanently altered, neither change would render M1 permanently unreliable as a policy target. Moreover, the variables commonly suggested as alternatives to M1—such as nominal and real interest rates, commodity prices, or the broader monetary aggregates—have well-known drawbacks as targets for policy. The drawbacks of these alternatives derive either because the Federal Reserve has imperfect control over them or because their relationship to economic activity is relatively unreliable.

Monetary policy actions in 1985 were generally accommodative over the year as interest rates fell, the dollar depreciated, and money growth was rapid. The Federal Reserve's accommodative actions were apparently motivated by a perceived need to foster stronger real growth. However, efforts to tailor monetary policy to contemporaneous economic conditions run the risk of being destabilizing. Because of the lags and inaccuracies in reported contemporaneous economic data, and the length and variability of the lags in the effect of monetary policy, policy actions aimed at a currently perceived problem will not affect the economy until well after the problem has appeared and perhaps disappeared. A policy of targeting real economic activity increases the probability that policy itself becomes destabilizing as economic developments emerge that are unanticipated or inaccurately forecasted.

Stable and moderate money growth will neither remove all of the uncertainty that surrounds policymaking nor prevent unforeseen shocks from affecting the economy. However, stable, predictable monetary policy can eliminate monetary policy itself as a source of uncertainty and as a potentially destabilizing force. In addition, an announced and well-articulated monetary policy can help reduce uncertainty about the economic outlook and foster a stable and predictable economic environment.

The setting and achieving of money-growth targets is a critical element of just such a credible monetary policy. In addition to providing monetary discipline, appropriate, pre-announced monetary targets that are achieved through consistent policy actions transmit important information to the public about prospective inflation. The principles of monetary targeting discussed at length in this *Report* last year are equally appropriate now. These include a targeting procedure that would eliminate year-to-year "base drift" in the target range and institute a target range constructed of parallel bands that would provide greater latitude for the targeted level of M1 early in the year.

Even recognizing the uncertainty about the current behavior of velocity, it is difficult to dismiss the inflationary threat that would be implied by persistence of the monetary growth rate experienced in 1985. Any plausible explanation of long-term velocity behavior indicates the need to decelerate money growth in order to limit the threat of higher inflation. The Administration strongly recommends that that deceleration be achieved gradually and predictably, in order to avoid the restriction of real economic activity that is associated with abrupt declines in money growth and long periods of very slow money growth.

LONG-TERM OUTLOOK

The Administration's longer term projections are contingent on the following macroeconomic policies. First, the longer term inflation and real growth projections will require a gradual deceleration of money growth that is consistent with restoring price stability and that also avoids any policy-related disruption to the real economy. Second, the projections assume that the deficit reduction goals defined in the Gramm-Rudman-Hollings Act are achieved by a reduction in the growth of government spending. Third, it is assumed that a tax reform bill is enacted that is similar to the President's Tax Proposals for Fairness, Growth, and Simplicity. With a commitment to these policies, sustained growth and stable prices are not only possible, but probable.

Determinants of Real Growth

The growth of real GNP in the long run depends largely on the growth in productive resources and technological change. This concept provides the basis for the Administration's long-term projection of real GNP growth. In particular, the projected growth rate of real GNP for the period 1986–91 is based on assumptions of employment and productivity growth, the latter reflecting additions to the capital stock, additions to labor skills, and technological change.

Table 1–6 contains a convenient accounting progression from population growth to real GNP growth. This involves partitioning real GNP growth into the part associated with growth in total labor hours worked and the part associated with growth in output per hour worked (productivity growth). The first column reports average annual growth from the expansion peak in 1948 to that in 1981. The second column reports average growth from the peak in 1973 to the peak in 1981. The third column shows average growth from the 1981 peak through the fourth quarter of 1985, and the final column shows the Administration's projections for 1985–91.

The progression through the table is straightforward. The foundation for real GNP growth is population growth. The first five rows of Table 1–6 translate population growth into civilian employment growth. The process begins with Bureau of the Census estimates of population growth for past time periods and its projection for 1985–91 (row 1). Using historical growth rates and the Administration's projection for labor force participation growth (row 2) and growth in the civilian employment rate (row 4), past and projected growth rates for total civilian employment are calculated (row 5). The projected growth in civilian employment of 1.8 percent per year is only slightly

TABLE 1-6.—*Accounting for growth in real GNP, 1948-91*

[Average annual percent change]

Item	1948 IV to 1981 III	1973 IV to 1981 III	1981 III to 1985 IV[1]	1985 IV to 1991 IV[1]
GROWTH IN:				
(1) Civilian noninstitutional population aged 16 and over	1.5	1.8	1.2	0.9
(2) PLUS: Civilian labor force participation rate	.2	.5	.5	.6
(3) EQUALS: Civilian labor force	1.8	2.4	1.6	1.5
(4) PLUS: Civilian employment rate	−.1	−.4	.1	.3
(5) EQUALS: Civilian employment	1.7	2.0	1.7	1.8
(6) PLUS: Nonfarm business employment as a share of civilian employment	.1	.1	.2	.2
(7) EQUALS: Nonfarm business employment	1.7	2.1	2.0	2.0
(8) PLUS: Average weekly hours (nonfarm business)	−.4	−.6	.1	−.2
(9) EQUALS: Hours of all persons (nonfarm business)	1.4	1.5	2.0	1.8
(10) PLUS: Output per hour (productivity) (nonfarm business)	1.9	.6	.9	2.1
(11) EQUALS: Nonfarm business output	3.3	2.0	2.9	4.0
(12) LESS: Nonfarm business output as a share of real GNP	.0	−.1	.6	.2
(13) EQUALS: Real GNP	3.3	2.2	2.4	3.8

[1] Data for 1985 IV are preliminary.

Note.—Based on seasonally adjusted data.
Detail may not add to totals due to rounding.

Sources: Department of Commerce (Bureau of the Census and Bureau of Economic Analysis), Department of Labor (Bureau of Labor Statistics), and Council of Economic Advisers.

above the 1948-81 average and lower than the performance of the 1970s.

Conversion of employment growth into output growth requires measures of growth in productivity and hours worked, but these variables are not available for the entire economy. Consequently, total employment is transformed into total hours worked in the nonfarm business sector by the calculations performed in rows 6 to 9. The resulting expected growth in total nonfarm business hours worked for 1985-91 (row 9) is 1.8 percent per year. A crucial step in the projection of output growth involves the projection of nonfarm business productivity growth (row 10). The Administration expects a rebound in growth to the 1948-81 trend and has projected nonfarm business productivity growth of 2.1 percent per year from 1985 to 1991. The projection recognizes that current and proposed policies should generate strong, sustained productivity growth.

Many factors influence productivity growth. Capital formation is an important source of productivity growth. From 1948 to 1981 the net capital stock averaged growth of about 4 percent per year and, with hours worked growing at 1.4 percent, growth in capital per hour averaged 2.5 percent. This accounts for about 0.7 percent, or one-third, of productivity growth. The extent to which capital formation improves productivity depends critically on the accumulation of capital that can be used efficiently. Government policies that distort investment decisions either through subsidies, regulatory constraints, or special tax provisions can erode the contribution of capital to growth. The President's tax reform proposals specifically address this through more equal effective tax rates across investment activities.

Combining the projected productivity growth with employment growth and adjusting for expected growth of the nonfarm business sector relative to the rest of the economy, yields the Administration's real GNP growth projection of 3.8 percent per year from 1985 to 1991 (row 13). As the progression through the growth accounting framework indicates, this projection does not require any unprecedented employment or productivity growth.

The Outlook for 1986–91

Table 1–7 summarizes the Administration's forecast for 1986 and its long-term economic projections for 1987–91. The longer term projections should not be interpreted as year-to-year forecasts, but rather as expected trends. To place these projections in a proper perspective, it is important to realize that in general they imply a return to the economy's postwar trend. They do not indicate unprecedented performance by the economy over the next 6 years.

TABLE 1–7.—*Administration economic assumptions, 1986–91*

[Calendar years]

Item	1986	1987	1988	1989	1990	1991
	Percent change, year to year					
Real GNP	3.4	4.0	4.0	3.9	3.6	3.5
Real compensation per hour[1]	.9	2.3	2.5	2.4	2.3	2.2
Output per hour[1]	.9	2.0	2.1	2.1	2.2	2.3
Consumer price index[2]	3.5	4.1	3.7	3.3	2.8	2.1
	Annual level					
Employment (millions)[3]	110.7	112.7	114.7	116.7	118.9	120.9
Unemployment rate (percent)[4]	6.7	6.5	6.3	6.1	5.8	5.6

[1] Nonfarm business, all persons.

[2] For urban wage earners and clerical workers.

[3] Includes resident Armed Forces.

[4] Unemployed as percent of labor force including resident Armed Forces.

Source: Council of Economic Advisers.

These projections are based on the premise that stable, predictable policies will provide the economic environment that is conducive to growth. The policies of this Administration have generated an environment within which strong economic growth has already occurred. A continued commitment to this course is the key to sustained growth and the realization of these projections.

LESSON FOR THE FUTURE

The unsatisfactory economic performance associated with the rise of inflation and the adjustment problems that arise during disinflation provide a clear lesson: reacceleration of inflation must be prevented. The surest way to avoid the costs of both inflation and disinflation is to avoid the policies that lead to an acceleration of inflation. Moreover, the experience of the past 3 years has indicated that substantial economic growth can occur without rekindling inflation. The disinflation process has clearly caused financial stress in many sectors that incurred debt during the period of high inflation. But a reacceleration of inflation is not a proper policy response to this stress. The capital gains and losses associated with the market revaluation of debt have already largely occurred. A resurgence of inflation would set in motion another round of arbitrary capital gains and losses like those experienced in the 1970s.

Memories of rising inflation in the 1970s are still fresh in the public's mind. If inflation were allowed to resurge to the rates recorded in the late 1970s, inflation expectations would likely rise rapidly, and quickly and firmly become imbedded in economic behavior. Skepticism about the government's ability and willingness to provide long-run price stability could be validated and strengthened. There is every reason to believe that future attempts to reduce a rekindled rate of inflation would be very costly.

The government, particularly the Federal Reserve, has a responsibility to provide price stability. For reasons reflected throughout this *Report,* the Administration believes that price stability is a basic prerequisite for healthy economic growth. Given the economic dislocation and discomfort associated with reducing the inflation rate since 1981, the risk of allowing inflation to resurge carries with it the risk that those costs—and possibly even higher costs—will have to be borne again. The President remains committed to his original objectives of restoring price stability and sustaining economic growth and, with the cooperation of the Federal Reserve and the Congress, can meet these goals.

CHAPTER 2

The United States and Economic Development

AFTER WORLD WAR II, the United States in cooperation with other countries established the basic policies and institutions of the open system of world trade and investment that has since guided economic relations among nations. On the whole, the world has enjoyed an extraordinary record of economic progress under this system. Between 1950 and 1984, U.S. real per capita gross national product (GNP) rose at a 1.8 percent average annual rate, allowing nearly a doubling of average real living standards in 34 years. In the other nine largest Western industrial countries, real per capita income rose at a spectacular 3.7 percent average annual rate, implying that real living standards in these countries (as measured by real per capita GNP) rose by more than twice as much as they had in all of previous history. Despite disappointing economic performance of some developing countries, the average annual rate of growth of real per capita income for all developing countries was 2.8 percent between 1955 and 1984, implying more than a doubling of average real living standards in these countries in just 29 years.

The progress of developing countries over the past three decades is manifested in other important indicators of human welfare. Between 1955 and 1984, their population nearly doubled. Despite the problems of some developing countries, this increase in population was not accompanied by increasing human misery, as some feared, but rather by generally rising real living standards that were reflected in longer life expectancies, lower infant and child mortality rates, better nutrition and health care, and higher educational attainment. For example, between 1965 and 1983, average life expectancy rose by 9 years in lower income developing countries and by 8 years in middle-income developing countries.

This overall record of economic and social progress provides the context for this chapter's discussion of important economic problems that have recently afflicted a number of developing countries and of the policies that are needed to deal with these problems. The record of long-term economic success of many countries suggests that these problems can be successfully resolved. It also suggests that retention and refinement of the policies and institutions that helped to generate this success, together with reform of practices that have contributed to recent difficulties, is the appropriate prescription for restoring prosperity and reviving growth in countries that have suffered economic slowdown or stagnation.

To develop this main theme, it is appropriate first to discuss the substantial and growing importance of developing countries in the world economy. This is followed by a description of the general economic performance and recent economic problems of developing countries, including the problems associated with the international debt crisis. The chapter next examines economic policies that experience suggests are conducive to rapid and sustainable economic growth. The chapter concludes with a discussion of contributions that the developed countries can make to the economic performance of the developing countries and of improvements of the international economic system that can benefit all nations.

Before embarking on this discussion, it is important to stress the interest of the United States in seeking more vigorous economic growth in both developed and developing countries. Beyond wishing its friends well, the United States has a strong national interest in the economic prosperity of its allies, and has an important national interest in economic prosperity of developing countries, including especially countries striving to strengthen their democratic institutions. The United States also has an economic interest in the prosperity of other countries. Economic growth appears to be a mutually reinforcing process. For example, the rapid recovery in the United States during the first six quarters of the current expansion contributed significantly to recovery and expansion in other countries and particularly to easing of some of the economic problems of developing countries. Conversely, as discussed in Chapter 1, relatively sluggish recovery of other industrial countries and recent economic problems in many developing countries are seen as factors contributing to the deterioration of the U.S. trade balance during the current recovery and perhaps also to the slowdown of that recovery since mid-1984. Thus, for economic as well as broader national purposes, the United States has an important interest in rapid and sustainable growth in other countries.

ECONOMIC PERFORMANCE AND PROBLEMS OF DEVELOPING COUNTRIES

Developing countries are the home of three-quarters of the world's population. Their aggregate national products in 1983 were more than half of that of the United States and nearly double that of Japan.

Merchandise trade (exports plus imports) of the developing countries (including high-income oil exporters) in 1983 accounted for more than a quarter of total world merchandise trade and was more than twice the size of that of the United States, the world's largest trading country. The substantial and growing economic importance of developing countries is reflected specifically in the extent of trade between these countries and the United States and, especially during the past decade, in the flow of credit from the United States and other industrial countries to the developing countries.

TRADE BETWEEN DEVELOPING COUNTRIES AND THE UNITED STATES

The importance of trade with developing countries has been growing along with the general importance of international trade for the U.S. economy in the postwar period, especially during the past 20 years. In 1965 exports to and imports from developing countries were, respectively, 1.2 and 1.0 percent of U.S. GNP. They rose to 3.0 and 4.4 percent of U.S. GNP, respectively, in 1980. By 1984 the share of exports to developing countries in GNP fell to 2.0 percent, and the share of imports from such countries fell to 3.3 percent. The relatively small shares of exports and imports in U.S. GNP are somewhat deceiving because industries that account for about 70 percent of U.S. GNP produce either services that do not enter into international merchandise trade, or produce products that are largely nontradable. For the industries that account for the remaining 30 percent of U.S. GNP, international merchandise trade is of considerable importance. On average for these industries in 1984, exports to developing countries accounted for about 7 percent of annual product, and imports from developing countries accounted for about 11 percent of annual product.

Increased imports of some categories of manufactured goods from developing countries have been a particular cause of concern for and complaint by U.S. competitors. Without attempting to judge the merits of individual complaints, it should be noted that the United States has until recently had a trade surplus in manufactured goods with developing countries and still exports large amounts of such goods to these countries. In 1980 the United States exported $60 billion of manufactured goods to and imported $32 billion of such goods from developing countries, for a net export surplus of $28 billion. Although the magnitude of this surplus may have reflected temporary factors such as the weak dollar and the large borrowing of developing countries in 1980, the existence of such a surplus is consistent with past trends. By 1984 exports of manufactures to developing countries fell to $52 billion, while imports of manufactures from these countries rose to $64 billion, yielding a net export deficit of

$12 billion. The deterioration in the net trade position in manufactured products with developing countries, however, is proportionately smaller than the deterioration of the overall U.S. net trade position between 1980 and 1984.

The explanation of the behavior of the overall U.S. trade balance or current account balance, of course, cannot be found in analyses of changes in the bilateral trade imbalances between the United States and individual countries or groups of countries. As emphasized in Chapter 1, the overall trade balance or current account balance is a macroeconomic phenomenon whose behavior is primarily to be explained by the behavior of other macroeconomic variables, in particular economic growth of the United States in comparison with other countries, levels of saving and investment in the United States and in other countries, expenditure and tax policies of the U.S. Government and the governments of other countries, anticipated real rates of return on investments in different countries, and the real foreign exchange value of the U.S. dollar.

CREDIT FLOWS TO DEVELOPING COUNTRIES

The growing importance of financial relationships between developed and developing countries is apparent in the rapid growth of the real flow of financial resources to developing countries, as reported in Table 2-1. The net flow of funds to developing countries (in 1983 dollars), as estimated by the Organization for Economic Cooperation and Development (OECD), nearly doubled in real terms between 1970 and 1980, from $53.1 billion to $93.9 billion. After peaking in 1983 at $118.3 billion, this flow declined to $92.3 billion in 1984. The sources of these funds have shifted substantially over the past 15 years. In 1970 official development assistance accounted for 42 percent of the net flow of funds to developing countries, while lending by commercial banks accounted for only 15 percent of the total. By 1983 the share of official development assistance declined to 29 percent, while the share of bank lending (including rescheduling) rose to 46 percent. This trend was reversed in 1984, when the share of official development assistance rose to 39 percent of net lending and the share of commercial banks fell to 26 percent. More recent information indicates a further substantial decline in commercial bank net lending to developing countries in 1985.

By 1983 total external liabilities of developing countries reached an estimated $843 billion, equal to about one-third of the annual GNP of these countries and about 10 percent of the annual GNP of the developed countries. More than half of these liabilities were loans from commercial banks, and nearly a third of these bank loans were owed to U.S. financial institutions. The problems recently experi-

TABLE 2-1.—*Real net flow of funds to developing countries, selected years, 1970–84*

[Billions of 1983 dollars]

Type of receipt	1970	1975	1980	1981	1982	1983	1984
Official development assistance	22.2	31.6	36.1	36.2	33.7	33.8	35.8
Grants by private voluntary agencies	2.3	2.0	2.2	2.0	2.3	2.3	2.5
Nonconcessional flows	28.7	51.0	55.7	68.6	60.1	82.1	54.0
Official or officially supported flows	10.4	15.7	22.9	21.6	21.9	19.8	20.0
Private flows	18.3	35.4	32.8	47.0	38.2	62.3	34.0
Direct investment	9.7	16.9	9.9	16.8	11.8	7.8	9.5
Bank lending[1]	7.9	17.8	21.6	29.2	25.9	54.0	24.0
Bond lending	.8	.6	1.3	1.1	.5	.5	.5
TOTAL	53.1	84.6	93.9	106.8	96.1	118.3	92.3

[1] Includes for 1983 and 1984 significant amounts of rescheduled short-term debt.

Note.—Detail may not add to totals due to rounding.

Source: Organization for Economic Cooperation and Development.

enced by several of the high-debt countries in meeting their debt-service obligations, and the consequences of these problems for the financial institutions that hold their obligations, have dramatized the deepening financial relationships between developing countries and the United States and other developed countries.

ECONOMIC PROBLEMS OF DEVELOPING COUNTRIES

Economic growth in developing countries has been rapid over the past 30 years, on average, as indicated in Table 2-2. Some countries, however, have not shared in this progress over the long run, and, in the past few years, a number of countries with relatively good long-run performance have experienced economic difficulties. The chronic economic problems of many quite poor countries in Sub-Saharan Africa, South Asia, and Latin America deserve treatment separate from the acute difficulties recently experienced by middle-income countries with large debt burdens.

The low-income developing countries (those with per capita incomes of less than $400 in 1983) had an average annual growth rate of real per capita GNP of 2.3 percent between 1955 and 1984. This result is dominated by the performance of China and India, which together account for three-quarters of the population of low-income developing countries and which had a combined average annual growth rate of real per capita GNP of 2.4 percent over this period. Interestingly, the combined growth performance of these two large countries has been improving recently as they have adopted more market-oriented, pro-growth economic policies. Some other low-income developing countries have also enjoyed vigorous growth, including some spectacularly successful countries that earlier adopted market-oriented, pro-growth economic policies and have now graduated to the class of middle-income developing countries. In many other low-income countries growth performance has not been very strong. Between 1965 and 1984, real per capita income in the low-income countries of Sub-Saharan Africa rose at only a 0.5 percent average annual rate.

TABLE 2-2.—*Indicators of economic growth, 1955–84*

[Annual growth rate, percent]

Period	Population	Real GNP	Real GNP per capita
DEVELOPING COUNTRIES [1]			
1955-70	2.2	5.4	3.1
1970-80	2.2	5.3	3.1
1980-84	2.0	3.1	1.1
Low-income countries			
1955-70	2.1	3.7	1.6
1970-80	2.1	4.5	2.4
1980-84	1.8	6.7	4.9
Middle-income countries			
1955-70	2.4	6.0	3.5
1970-80	2.4	5.6	3.1
1980-84	2.4	1.8	−.6
INDUSTRIAL MARKET COUNTRIES			
1955-70	1.1	4.7	3.6
1970-80	.8	3.2	2.4
1980-84	.5	1.8	1.3

[1] Excludes the high-income oil exporters.

Source: International Bank for Reconstruction and Development.

The road to economic prosperity for many of the poorest countries will be a long and difficult one. In some extreme situations, such as the recent and continuing famine in Ethiopia, extraordinary external assistance has been essential to provide the bare requirements of human survival. The success of some formerly quite poor countries, however, gives hope that some of today's poorer countries will be able to graduate to the ranks of the middle-income developing countries by early in the next century.

The middle-income developing countries (those with per capita incomes between $400 and $7,000 in 1983) had good growth performance on average between 1955 and 1984. As a group, they recorded an average annual growth rate of real per capita income of 2.8 percent per year, enabling the real income of the average resident of these countries to rise by 123 percent in just 29 years. Some countries, of course, performed less well than the average, and a few even registered substantial declines in real per capita incomes over periods of two decades or longer. On the other hand, nine countries had growth rates of real per capita income of 5 percent per year or better between 1965 and 1983, implying an increase in real per capita income of more than 140 percent in just 18 years.

The early 1980s have been a period of sharp contrasts in the economic performances of developing countries. For all developing countries, excluding the high-income oil exporters, the average growth rate of real per capita income was only 1.1 percent per year between 1980 and 1984. Thanks primarily to the good performance and large weight of China and India, low-income developing countries registered a 4.9 percent average annual growth rate of real per capita income over these 4 years. Other low-income countries in Asia did about as well as China and India, on average, but low-income countries in Africa suffered a cumulative 8.7 percent decline in average real per capita income over these 4 years. For the middle-income developing countries, average real per capita incomes declined at a 0.6 percent annual rate between 1980 and 1984. Despite the recession in the industrial countries, some of these countries, especially in Asia, continued to enjoy strong real growth. Other middle-income developing countries, especially in Latin America, had enjoyed generally good growth during the 1960s and 1970s, but experienced economic stagnation or decline in the early 1980s.

EFFECTS OF EXTERNAL SHOCKS

For developing countries that experienced poor economic performance in the early 1980s, adverse external economic developments explain part, but only part, of this poor performance. Some countries whose national incomes depend heavily on revenues from oil exports saw their real national incomes decline because of the fall in world oil prices and in the volume of oil exports. However, some oil-exporting countries that saved some of their oil-export revenues in the 1970s have been able to draw on those savings to support domestic consumption and investment during a period of lower oil prices and export volumes. Other oil exporters that spent all of their export revenues and even borrowed from world capital markets to spend on consumption and domestic investment have faced a more difficult task in adjusting to lower oil exports and oil prices. The same is true for developing countries that experienced export booms for other commodities during the 1970s and failed to foresee that these booms might not last forever.

Moreover, evidence suggests that adverse external events are not primarily responsible for the recent poor economic performance of some developing countries. As previously mentioned, other developing countries that faced similar external circumstances continued to perform well in the early 1980s. Table 2–3 summarizes results from a World Bank study that compared the magnitude of external shocks to developing countries that needed to reschedule their external debts by the end of 1984 with countries that did not need to reschedule. The index of external shocks was calculated as the combined effects on a country's balance of payments of deteriorations in its terms of trade (the ratio of export prices to import prices), declines in world demand for its exports, and increases in interest rates on its outstanding external debt. In 1979–80 and 1981–82, the average adverse external shock was about the same for reschedulers and nonreschedulers. The average of annual growth rates of real gross domestic product (GDP) in 1979–83 for reschedulers, however, was only 0.9 percent, versus 4.3 percent for nonreschedulers.

TABLE 2–3.—*External shocks and real GDP growth in selected developing countries, 1979–83*

Country Category	Net external shocks as percent of GNP[1]		Growth of real GDP (percent)[2]
	1979–80	1981–82	1979–83
Reschedulers[3]	−2.6	−9.3	0.9
Nonreschedulers	−2.6	−8.4	4.3

[1] External shocks are defined as the impact on the balance of payments as a percentage of GNP of: (a) changes in the terms of trade; (b) a decline in the growth rate of world demand for a country's exports; and (c) increases in interest rates, averaged across countries.

[2] Averaged across countries and years.

[3] Countries that had rescheduled debt as of the end of 1984.

Sources: International Bank for Reconstruction and Development, *World Development Report, 1985*, and International Monetary Fund, *International Financial Statistics Yearbook, 1985*.

External shocks did, of course, affect developing countries in the early 1980s. The disinflation of the early 1980s was associated with an unwinding of the effects of the inflation of the 1970s on relative commodity prices, including prices of some products exported by developing countries. The recession in the industrial countries in the early 1980s reduced demand for the exports of developing countries. The real burden of the external, dollar-denominated debt of many developing countries rose as the dollar appreciated in foreign exchange markets. Increased nominal and real interest rates, especially in 1981, increased the debt-service requirements of heavily indebted countries with large amounts of floating-rate loans. Countering these adverse developments have been the recovery in the industrial countries, especially the United States, and the decline in interest rates since 1982, plus the recent moderate decline of the dollar.

The effects of movements in interest rates and in the foreign exchange value of the dollar on debt-service burdens were important for developing countries that chose, as a consequence of the policies they pursued, to borrow large sums from international capital markets. The problems of these countries are best understood in the context of a general discussion of the role of international credit flows and the current international debt situation.

THE ROLE OF INTERNATIONAL CREDIT

The international flow of capital performs at least two important economic functions. It allows countries with more attractive investment opportunities than can be financed out of domestic saving to obtain resources from countries with excess savings. It also allows countries suffering temporary economic difficulties to borrow from world capital markets rather than institute sharp temporary reductions in consumption or costly cutbacks in investment.

International capital flows have performed these functions for many countries over a long span of time. In the 50 years prior to World War I, the United States, Canada, Australia, Argentina, and the Scandinavian countries financed domestic investments with substantial loans from Great Britain and other European countries. The evidence indicates that despite occasional defaults and other difficulties, the providers of this credit earned higher returns than those typically available on investments in their own countries. In most of the period since World War II, the United States has been a net supplier of capital to the rest of the world, especially through the mechanism of direct investment by U.S. firms in foreign countries. The generally higher real growth rates of other industrial countries up to 1975 and of developing countries up to 1980 suggest that this flow of capital out of the United States was generally in the direction of higher returns. During the current expansion, the United States has become a net borrower in world credit markets. This is consistent with the high rate of return on and rapid growth of investment in the United States, in comparison with other countries, and with the need to finance the Federal deficit. The suppliers of credit to the United States are primarily other industrial countries where desired saving rates exceed desired rates of domestic investment.

With the exception of some oil-exporting countries, developing countries have generally been recipients of net capital inflows in the postwar period. Evidence indicates that from the mid-1960s to the late 1970s, there was a generally positive relationship between the growth of external indebtedness of particular developing countries and the growth of investment in these countries. Evidence suggests a similarly positive relationship between the growth of external indebtedness and the growth rate of real gross domestic product. This is consistent with the notion that international capital flows were, on the whole, performing the desirable function of financing investment in countries with good growth opportunities. From 1979 to 1983, however, there is no significant relationship between growth of external indebtedness and growth of investment for developing countries, and there is a negative relationship between growth of external debt and growth of real domestic product.

In the 1960s and 1970s, a few developing countries experienced difficulties in meeting their debt-service obligations and had to reschedule their external debts. At least up to 1979, however, these problems affected no more than two or three countries in any year, and the total amount of debt rescheduled in any year did not exceed $2 billion. In 1979, 7 countries rescheduled $6.2 billion of external debts; in 1980, 6 countries rescheduled $3.7 billion; and in 1981, 13 countries rescheduled $5.8 billion. In 1982 reschedulings fell when 9 countries rescheduled $2.4 billion; but in 1983, 21 countries rescheduled $51 billion; and in 1984, 24 countries (many of them the same as in the preceding year) rescheduled $116 billion. Because rescheduling agreements are typically reached some time after a country begins to experience debt-servicing difficulties, it is reasonable to conclude that by 1982 many of the developing countries with large external debts were already in trouble.

THE INTERNATIONAL DEBT SITUATION

A stylized description of events leading up to the recent international debt crisis is the following. Starting in 1973, growth of balance of payments surpluses of some high-income oil-exporting countries stimulated expansion of the international banking system that recycled these surpluses. Increased availability of credit on attractive terms through the international banking system increased opportunities for many developing countries to become borrowers from that system in the mid-1970s. Initially, debt-service requirements did not rise relative to the export earnings of many of these countries because they enjoyed rapid economic growth and because the inflationary expansion of the 1970s contributed to a boom in demand for their exports. Moreover, nominal interest rates on dollar-denominated loans declined from 1974 to 1976 and rose modestly between 1976 and 1978. Real interest rates became increasingly negative during the late 1970s as inflation accelerated. In addition, depreciation of the dollar relative to the currencies of other industrial countries after 1976 reduced the value of the dollar-denominated debt of many countries, thereby making further borrowing seem even more attractive.

In 1981–83 difficulties arose for many developing countries that had borrowed extensively from the international banking system in the late 1970s and 1980. The recession in the industrial countries, the high level of nominal and real interest rates (especially from late 1980 through mid-1982), the strengthening of the U.S. dollar, and the declines in the dollar prices of many commodities exported by heavily indebted developing countries (associated with the undoing of the inflationary excesses of the 1970s) contributed to an increase in the debt-service requirements of these countries relative to their export earnings, especially for countries with large volumes of dollar-denominated, floating-rate loans. To meet rising debt-service requirements, many debtor nations increased external borrowing. These high levels of borrowing, together with deteriorating export earnings and slackening economic growth, caused concern among lenders about the longer run capacity of these countries to meet their external debt-service obligations.

Table 2-4 presents data for two groups of debtor countries that are useful in understanding the debt crisis. Group A consists of indebted developing countries that incurred external payments arrears between 1981 and 1983 or rescheduled their external debts between 1981 and mid-1984. The 57 countries in group A accounted for 42.8 percent of GDP and 59.5 percent of the external debt of all developing countries in 1980. Group B consists of those indebted developing countries that did not experience recent debt-servicing difficulties. The 66 countries in group B accounted for 43.2 percent of GDP and 40.5 percent of the external debt of all developing countries in 1980. These two groups had the same average annual growth rate of real GDP, 5.5 percent per year, from 1967 to 1976. Both groups enjoyed substantial growth between 1976 and 1980, although even by this stage, countries in group B (with generally lower external debt burdens) were growing somewhat more rapidly. The growth rate of real GDP for group A fell to 1.1 percent in 1981, to -0.1 percent in 1982, and to -1.9 percent in 1983, and was estimated to be only 2.0 percent in 1984. In contrast, group B continued to enjoy impressive growth rates of real GDP, with annual growth rates of 5.1 percent in 1981, 4.0 percent in 1982, 5.4 percent in 1983, and an estimated 5.7 percent in 1984.

Another important difference between these two groups is the behavior of their respective current account balances. On average, from 1967 to 1976, group A had a slightly larger current account deficit as a percentage of exports of goods and services than group B. By 1977 the current account deficit as a percentage of exports had risen to 25.5 percent for group A, while it was only 6.1 percent of exports for group B. In the late 1970s and early 1980s the current account deficit of group B remained modest, peaking at 14 percent of exports in 1981. For group A the current account deficit remained much larger, peaking in absolute size in 1981, and relative to exports at 33.3 percent in 1982. An important factor contributing to the larger current account deficit of group A was the interest they had to pay on their larger external debt.

A current account deficit implies an excess of national spending over national income that must somehow be financed. The primary

TABLE 2-4.—*Debt indicators for developing countries, 1967–84*

Indicator by country group[1]	1967-76 average	1977	1978	1979	1980	1981	1982	1983	1984[2]
					Percent				
Growth of real GDP									
Group A	5.5	5.4	3.7	5.3	3.9	1.1	−0.1	−1.9	2.0
Group B	5.5	6.3	8.2	4.7	4.9	5.1	4.0	5.4	5.7
					Billions of U.S. dollars				
Exports of goods and services									
Group A	…	107.8	117.3	154.5	201.3	207.4	185.4	178.2	192.1
Group B	…	154.5	183.5	240.1	310.5	328.2	319.1	322.5	354.9
					Percent of exports of goods and services				
Current account balance									
Group A	−18.5	−25.5	−31.9	−25.3	−23.7	−32.2	−33.3	−14.4	−7.6
Group B	−13.3	−6.1	−10.6	−9.4	−9.4	−14.0	−12.9	−10.5	−6.5
Net external borrowing									
Group A	…	29.5	36.1	28.8	32.3	37.5	32.2	18.3	11.0
Group B	…	8.9	10.9	10.5	10.6	12.9	11.9	10.2	7.2
Net asset transactions plus errors and omissions									
Group A	…	−7.4	−5.9	−3.4	−10.0	−14.5	−16.7	−6.2	…
Group B	…	−3.1	−1.6	−2.5	−2.2	−2.1	−2.2	−2.7	−2.2
External debt									
Group A	…	171.7	195.8	178.1	167.1	194.5	246.0	268.1	256.8
Group B	…	95.3	91.9	81.6	73.6	78.3	91.1	97.0	94.2
Debt-service payments									
Group A	…	22.3	29.6	30.2	26.9	33.8	41.6	36.2	36.6
Group B	…	10.0	11.8	11.7	11.0	12.7	14.6	14.4	14.9

[1] Group A: countries with recent debt-servicing problems.
Group B: countries without debt-servicing problems.
[2] Estimates.

Source: International Monetary Fund, *World Economic Outlook, 1985*.

means of finance for developing countries is usually external net borrowing. This is shown in Table 2-4 in the close relationship between net external borrowing as a percentage of exports and the current account balance as a percentage of exports for both groups of countries. Not surprisingly, debt-servicing difficulties are associated with countries that run large and persistent current account deficits that need to be financed by large and persistent net external borrowing.

Loss of confidence in a country's creditworthiness might be expected to affect internal as well as external creditors, leading to a flight of domestic capital. This is reflected in Table 2-4 in the behavior of net asset transactions plus errors and omissions in the balance of payments. As a percentage of exports, these items remain quite small for group B, which did not experience debt-servicing problems. For group A, however, these items grow quite large in 1980–82.

Adverse external developments can contribute to a loss of confidence in creditworthiness. A decline in export earnings due to a decline in world market demand for a country's exports may cause creditors to worry about the security for their loans. For a country with a large amount of floating-rate debt, an increase in interest rates increases debt-service requirements. This tends to worsen the current account balance, thereby contributing to creditor worries. Such events did adversely affect many heavily indebted developing countries in the early 1980s. However, the extent of these effects depended on the size of a country's external debt. In Table 2-4, group A has a higher ratio of debt service to exports in both 1977 and 1982 and a larger increase in this ratio between 1977 and 1982 than group B. This is not because group A faced higher interest rates or a larger increase in interest rates. It is because they had a higher ratio of external debt to exports in 1977 and a larger increase in this debt ratio between 1977 and 1982. Especially in developing countries where most external debt is government debt, the effects of changing interest rates on debt-service problems are a mixture of the effects of external events and of past government policies.

When a country experiences debt-servicing difficulties, its creditors tend to want to reduce their exposure by collecting all interest and principal payments as they come due, while extending no new credit. This may be neither desirable nor feasible. For the countries that experienced debt-servicing difficulties to pay all of the interest and principal on their external debts in 1982, without any new gross external borrowing, they would have had to move from net external borrowing equal to 37.5 percent of exports in 1981 to net external lending equal to principal payments on outstanding external loans (probably about 20 percent of exports). This would have required these countries to improve their trade balances in 1982 by more than $100 billion, relative to actual performance. Engineering such a massive change in the trade position of these countries was probably not feasible in so short a time, and it certainly would have been very costly. Moreover, it is questionable whether the major creditor countries, including the United States, would have wished to see a deterioration of more than $100 billion in their own trade balances, which would have been the necessary counterpart of an improvement of similar magnitude in the trade balances of debtor countries. To deal with this problem, debtor countries and their creditors normally attempt to negotiate rescheduling arrangements under which the creditors agree to extend the time period for repayment of the principal and sometimes part of the interest on existing loans.

THE ROLE OF THE INTERNATIONAL MONETARY FUND

In most cases, debt rescheduling involves formal standby lending arrangements with the International Monetary Fund (IMF). The IMF establishes such arrangements as part of its general function to provide financial support to countries experiencing balance of payments difficulties, provided that they adopt policies holding promise of correcting these difficulties. Typically, under these agreements, the IMF provides only part of the new credit extended to a debtor country, but the agreement is frequently an effective precondition for a rescheduling arrangement with other creditors. As a condition for IMF support, countries agree to pursue policies directed at improving their capacity to meet their external obligations. Usually, the agreed policies seek reductions or limitations of government spending, government borrowing, and credit and money creation. The policies are intended to reduce domestic spending relative to domestic income and thereby improve the current account balance. In many cases, a devaluation of the exchange rate is also adopted as a means of improving the current account balance by increasing the price of internationally traded goods relative to home goods. Such a relative price change tends to reduce imports, increase exports, and shift resources toward the tradable goods sector of the economy.

The IMF has been criticized, in some quarters, especially in developing countries, on the grounds that it recommends policies that focus too strongly on achieving short-term improvements in the balance of payments, rather than promoting longer term growth, and that contribute downward pressure on economic activity in countries already subject to strong recessionary forces. It is certainly true that several countries that adopted economic policies recommended by the IMF suffered severe recessions in the early 1980s. It is far less clear that these policies were primarily responsible for the severity of these recessions or that, under the circumstances, there was any real alternative to adopting some of these policies. These circumstances included the cumulative effects of past government policies and of adverse external events that contributed to the loss of confidence in the creditworthiness of a number of heavily indebted developing countries. A country that cannot borrow because of lost confidence in its creditworthiness must adopt policies that keep the excess of spending over income within the range of permitted borrowing. Because its own resources are limited, the IMF's capacity to expand the supply of credit (including borrowing to make debt-service payments) depends partly on its capacity to persuade other creditors that policies undertaken by debtor countries offer reasonable hope of restoring creditworthiness. Moreover, some of the countries that have established standby agreements with the IMF have improved their current account balances. This task might well have proved more difficult and more painful without the assistance of the IMF.

The critical issue for the future is how to resolve the economic problems of debtor countries in the manner most advantageous to them, to their creditors, and to the world as a whole. The mutually advantageous resolution is clearly one that restores these countries to paths of rapid, sustainable, noninflationary economic growth, thereby assuring creditors of repayment and benefiting the world economy through a general expansion of trade and economic activity. This most desirable outcome requires that developing countries pursue policies that support their own economic growth and structural adjustment, that the United States and other industrial countries maintain high and stable rates of economic growth, and that the nations of the world cooperate in sustaining an open system of international trade and investment that enables each of them to realize its full economic potential.

POLICIES FOR ECONOMIC GROWTH AND DEVELOPMENT

Achievement of a rapid rate of economic growth has been a key objective of economic policy in many older and newly emergent developing countries for the past three decades. Different countries at different times have pursued a wide array of different policies in their efforts to stimulate and sustain rapid rates of growth, and have enjoyed varying degrees of success in these efforts. From this wealth of experience, it is possible to learn a good deal about economic policies likely to support successful development and about policies likely to inhibit economic growth.

ESTABLISHING APPROPRIATE INCENTIVES THROUGH RELATIVE PRICES

One basic lesson is that the rules governing economic behavior in developing countries do not fundamentally differ from the rules governing such behavior in more economically advanced countries. Allowed the opportunity to pursue their own interests, individuals respond to the incentives implicit in the relative prices of products they consume and produce and of factor services they sell or employ. Hence, it is crucial that economic policies operate to confront individuals with relative prices of products and factors that accurately reflect their true values and allow them to respond appropriately to the incentives embodied in these prices.

The importance of this point has not always been recognized in either developing or developed countries. For example, policies that depress prices of agricultural commodities in many developing countries are often seen as benefiting low-income consumers, without much reducing agricultural production. Experience demonstrates the error of this supposition. When prices of cash crops are depressed by export taxes, overvalued exchange rates, or price controls, production declines as farmers shift to crops with higher market prices or shift back to subsistence agriculture, sometimes with disastrous consequences for the national food supply. The opposite side of this coin has been observed in many developed countries where programs to support prices of agricultural products have generated mountains of surplus grain, oceans of surplus dairy products, and enough sugar production to please even Mary Poppins.

Another recent example of this fallacy is the supposed lack of responsiveness of producers and consumers to changes in the price of energy. After 1973 the U.S. Government imposed controls on the prices paid to domestic producers of oil and natural gas and on standards for energy consumption, including fuel economy standards for automobiles. Part of the rationale for these controls was the supposition that allowing domestic energy prices to rise would redistribute income from energy consumers to domestic energy producers, but would have little effect on the quantities of energy produced and consumed. However, as discussed in Chapter 5, energy production in the United States responded strongly to the incentives provided by higher prices. Similarly, when consumers faced higher energy prices, they demanded higher gas mileage vehicles, better insulated homes and factories, and more energy-efficient equipment and applicances.

The relevance of this point is not limited to the United States. In some oil-exporting countries, domestic fuel prices were kept well below world market levels throughout the 1970s. When the economic situation of many of these countries deteriorated in the early 1980s, there was resistance to raising domestic fuel prices as a means of conserving a valuable resource because it was believed that price increases would reduce real incomes of fuel consumers without stimulating much conservation. Countries that raised domestic fuel prices, however, found that fuel consumption responded to the incentives created by higher prices.

MAINTAINING REASONABLE FISCAL DISCIPLINE

A second basic lesson from experiences with economic growth is the virtue of maintaining reasonable fiscal discipline. This requires that governments not run large and persistent fiscal deficits, especially deficits financed by inflationary money creation or by heavy foreign borrowing, and that the size of the public sector be limited.

The "reasonable" size of the fiscal deficit depends on the situation and circumstances of particular countries. A country that enjoys rapid economic growth can usually expand its money supply more rapidly without generating inflation than a country that suffers slower economic growth. A country with good credit standing can finance a temporary fiscal deficit by foreign borrowing, while a country with a poorer credit rating may not have this option. A country that devotes a large fraction of its income to productive and profitable investments can sustain a higher rate of foreign borrowing than a country that does not invest as much in its future growth. However, the experience of many developing countries in the international debt crisis of the early 1980s demonstrates the dangers and disadvantages of policies that lead to persistent, large-scale foreign borrowing.

More generally, experience indicates that countries whose governments run large and persistent fiscal deficits (sometimes exceeding 8 or 10 percent of national income) may enjoy rapid economic growth for a while, but sooner or later they suffer severe economic difficulties. These difficulties may become acute during periods when deficits are being curtailed, thereby complicating observed relationships between fiscal deficits and economic performance. The painful effects of reducing government deficits, however, should be attributed to their basic cause. We suffer hangovers not because we stop drinking, but because we drank too much in the first place.

The appropriate size of the public sector is a critical issue to be resolved by any society. Experience does not provide unambiguous evidence that the size of the public sector, within a certain range, is strongly and negatively correlated with the rate of economic growth, but it does suggest that large public sectors are not associated with superior growth performance. For the industrial countries, the share of government spending in GNP has generally risen over the postwar period, and the rate of economic growth has generally declined. Japan has enjoyed the highest rate of economic growth among the major industrial countries and has also had the lowest share of government spending in GNP. In the 1950s and 1960s, Western European countries generally had higher rates of economic growth than the United States, even though they generally had somewhat larger public sectors. More recently, however, as many Western European countries have increased their share of public spending, their growth performance has fallen off, both absolutely and relative to the United States. Among developing countries, the evidence is mixed concerning the cross-sectional relationship between the size of the public sector and the rate of economic growth. There are, however, a number of examples where rapid growth of the public sector has been associated with a deterioration of growth performance. Moreover, large public sectors generally need to be supported (sooner or later) by high taxes. High tax rates create disincentives for working, saving, and investing, and, as some evidence shows, tend to be associated with lower rates of economic growth.

For a country with a large public sector, it is especially important that the public sector be run efficiently. Public sector enterprises that provide services similar to those that might be provided by private firms (such as electricity or transportation) should meet the standards of efficiency and profitability normally expected of private sector enterprises. Some public sector enterprises may meet this performance criterion; many do not. Often, employment in public sector enterprises is artificially high and wage and benefit levels for workers and managers of such enterprises exceed levels generally prevailing in the private sector. As discussed in Chapter 5, public sector enterprises in the United States are less efficient than their private sector counterparts. Evidence suggests that public sector enterprises in developing countries also suffer from serious inefficiencies, implying that substantial gains can be made by making public sector enterprises behave more like private firms or, better still, by shifting their activities to private firms.

Restoring fiscal discipline is a politically painful exercise. The short-run effect of either a reduction in government spending or an increase in taxes may be a decline in economic activity. The longer run effect of higher taxes, which distort economic incentives, is likely to be a lower level of real income. Moreover, the beneficiaries of deficit spending see themselves harmed by spending cuts, by tax-rate increases, or by efforts to expand the tax base. There is an important asymmetry here. Recipients of subsidized public services, transfer payments, or special tax breaks frequently blame governments for reducing these benefits. They do not protest with similar intensity the failure to provide such benefits in the first place. Hence, to maintain reasonable fiscal discipline, it is important not to initiate programs that may become expensive and are likely to generate interest groups supporting their continuation.

RESTRAINING GENERAL PRICE INFLATION

A third basic lesson is that a rapid rate of price inflation is generally associated with relatively poor growth performance. For the industrial countries, the higher inflation period of the 1970s and early 1980s generally brought poorer economic performance than the lower inflation period of the 1950s and 1960s. Some developing countries with inflation rates in the range of 20 to 40 percent per year have enjoyed reasonably good real growth. When inflation rates have accelerated to 50 percent per year or higher, however, growth performance has generally been poor relative to lower inflation periods. Inflation rates of 100 percent per year or higher have frequently been associated with economic stagnation or decline. Successful efforts to reduce high inflation rates have usually been associated with higher real economic growth. Countries enjoying the highest real growth rates have generally had low or moderate inflation rates.

The causal linkage between high inflation and poor growth is complex. Because governments often resort to inflationary policies when their economies are not performing well, inflation can be a symptom as well as a cause of poor economic performance. In theory, a country could have a high and predictable rate of inflation, and could adjust its economic institutions (including its tax system) to such inflation. In practice, high inflation rates are usually variable and unpredictable. High and variable inflation rates tend to induce wide variations in relative prices that interfere with the signals concerning the appropriate allocation of resources. With high and variable inflation rates, economic agents divert time, effort, and resources from productive activities into socially unproductive efforts to profit or to avoid losses from inflation and its attendant effects. Inflation frequently interacts with other distortions of the economic system to impair economic performance. For example, taxation of interest and other returns from capital on a nominal rate of return basis produces high real effective rates of taxation in the presence of high inflation. Schemes for indexing wage rates and other economic variables to deal with the problems of inflation can reduce the flexibility of the economy to deal with other types of disturbances. Under general price inflation, controlled nominal prices of basic commodities and public services frequently result in low relative prices of these goods and services. Governments are often reluctant to raise these controlled prices for fear that it will contribute to inflation or stimulate political protests. Enlarged fiscal deficits necessary to finance high real subsidies on basic commodities and to pay for the deficits of public sector enterprises, however, can stimulate increased money creation that in turn accelerates inflation.

MAINTAINING AN OPEN POLICY TOWARD INTERNATIONAL TRADE

A fourth basic lesson is that an outward looking, open policy toward international trade tends to be conducive to rapid economic growth. The essence of such a policy is that internal relative prices of internationally traded goods are not forced to diverge too far from world market prices because of import tariffs or quotas, exports taxes or subsidies, multiple or misvalued exchange rates, or other government policies. An open policy toward international trade allows for relatively unrestricted importation of products cheaply available in world markets and for exportation of products in which a country has or can develop a comparative advantage.

This contrasts with the inward looking, import-substitution policies adopted by many developing countries early in the postwar period. The objective of these import-substitution policies was to stimulate economic growth by encouraging development of domestic industries to produce products (especially manufactured products) previously imported. The tools were high-import tariffs, restrictive import quotas, foreign exchange licensing schemes, and other protective devices. In a few extreme cases, domestic producers could even obtain absolute prohibitions of imports on the promise that they would supply domestic substitutes.

Many studies have shown that relatively open policies toward international trade provide a better environment for economic growth in developing countries than policies of import-substitution. The most rapidly growing countries generally have relatively open trade policies. Countries that have shifted from import substitution to more open policies have generally improved economic performance. In contrast, import-substitution policies have produced large distortions between the domestic relative prices of tradable goods and the true costs of these goods, as reflected in world market relative prices. As a result, resources were diverted from potential export activities into production of high-cost domestic substitutes for products that could be purchased more cheaply in world markets. In addition, smaller countries that adopted import-substitution policies lost economies of scale by attempting to produce a diversified range of products for a small domestic market, rather than concentrating on a more limited range of products to be produced for export as well as domestic consumption. In some cases, loss of productive efficiency was exacerbated by a decline in market discipline on domestic firms and their workers because these firms faced little internal competition and were shielded from foreign competition.

Some countries with relatively open policies toward international trade have provided temporary protection for some import-competing industries or have given direct or indirect export subsidies to some industries (including preferential tax treatment and favorable tariff rates on imported inputs used in these industries). In some cases, special privileges accorded to particular industries may merely offset other distortions that impair the exploitation of natural comparative advantage. Although there are a few examples of successful industrial targeting, there are also many examples of industries that have become successful exporters without benefit of specific targeting by government authorities. There are also examples of industries targeted for development that never proved especially successful. Worst of all are the examples of targeted industries that continue to require subsidies or protection long after they were initially selected for special assistance. The general lesson appears to be that industrial targeting may occasionally succeed when a government has the luck to select the right industries for development. But there is a danger that special government privileges will be supplied for long periods to industries with little development potential. Moreover, if private sector investors err in selecting an industry for development, they bear an important part of the cost of that mistake, rather than passing it on to the rest of society. For this reason, there is less danger that the private sector will prolong activities that prove unsuccessful.

Given that most countries will not pursue policies of complete free trade, it is important to recognize that some impediments to trade are worse than others. A uniform ad valorem import tariff applied to all imports is generally less distortionary than a tariff structure with the same average tariff rate but with wide variations in the tariffs applied to individual commodities. This is especially so when imported goods are used as inputs in producing other goods. In this situation, relatively small variations in nominal tariff rates can generate large differences in effective rates of protection for value added in different domestic production activities. Large differences in effective protection rates, in turn, imply large distortions of the incentives to devote domestic resources to different production activities.

In general, import tariffs are less harmful than import quotas that provide the same initial level of protection. Tariffs raise revenue for the government. The implicit revenue associated with an import quota is usually distributed to the private parties who receive quota allocations and who hence have an interest in preserving and enhancing the scarcity value of the right they have received. A tariff generally allows less latitude for the exercise of market power by domestic producers of import substitutes (or by suppliers of factors to such producers) than does an import quota. With an import tariff, the degree of protection for domestic producers relative to foreign competitors is fixed; domestic producers are therefore under pressure to match the efficiency gains of their foreign competitors. With an import quota, the discipline on domestic producers to remain efficient is often diminished because the level of protection rises to offset any deterioration in the efficiency of domestic producers relative to their foreign competitors. Systems of foreign exchange licenses, with different exchange rates for different classes of imports and exports and with complicated mechanisms for the allocation of licenses, share the disadvantages of import and export quotas and frequently offer even greater latitude for harmful manipulation.

MAINTAINING AN APPROPRIATELY VALUED EXCHANGE RATE

A fifth basic lesson from the growth experiences of developing countries is the importance of maintaining an appropriately valued exchange rate. The exchange rate is the price of domestic money in terms of foreign monies. The economically appropriate exchange rate establishes the correct relationship between internal nominal prices of goods and services in terms of domestic money and the nominal prices of goods and services in terms of foreign monies. For most developing countries that maintain some form of pegged exchange rate, the economically appropriate exchange rate is difficult to identify with great precision. However, there is little doubt that some developing countries have injured their export industries and their overall growth performances by maintaining substantially overvalued exchange rates. Frequently, this has happened because rapid domestic inflation has transformed an initially appropriate nominal exchange rate into a substantially overvalued exchange rate.

The initial effect of an overvalued exchange rate is often to enlarge a country's trade deficit beyond the level that can be financed by the normal equilibrium level of capital inflow. In the short run, to sustain the foreign exchange value of its currency, the government may intervene in the foreign exchange market by using its official reserves or reserves borrowed on the world capital market. Alternatively, a large-scale capital inflow resulting from either official foreign borrowing or from private capital inflows can contribute to overvaluation of the exchange rate by financing an excess of domestic spending over domestic income. To sustain an overvalued exchange rate and stem reserve losses, governments frequently resort to trade restrictions and foreign exchange controls. Although the reason for imposing these restrictions may not be a desire to engage in import substitution, the effect is the same—a distortion of the economically appropriate relationship between internal and external prices and a corresponding distortion of incentives for the efficient allocation of resources.

LIMITING DISTORTIONS OF DOMESTIC PRODUCT AND FACTOR MARKETS

A sixth basic lesson from the experiences of developed and developing countries is the importance of limiting distortions of domestic product and factor markets. Such distortions can arise from the activities of private economic agents, in particular through the exercise of market power. The appropriate role of government policy in this regard is not to facilitate the exercise of market power by supporting cartels or other anticompetitive practices but to promote competition. Even more important, the government should not allow its own policies to distort excessively the markets for domestic products and factors.

Some distortion of domestic product and factor markets is the inevitable consequence of taxes used to raise revenue to finance essential government operations. The harmful distortionary effects of taxation generally rise more than proportionately with the rate of tax-

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ation. They become especially acute when rates of taxation are highly variable across similar products or across different uses of the same factor of production. Hence, it is important to keep overall tax rates as low as possible and to keep tax rates relatively even across similar products and different uses of the same factor of production. Increasingly, experience suggests that low and even tax rates contribute to economic growth, presumably by maintaining incentives to work, save, and invest.

To keep overall tax rates low, it is vital to limit public spending financed by tax revenues. The appropriate rule with respect to public spending is that the marginal social value of such spending should exceed its direct cost by enough to compensate for the distortionary and collection costs of the taxes necessary to finance it. For the United States, the true social cost of Federal Government spending has been estimated at one and one-half times the direct budget cost. For many developing countries that may have higher tax collection costs and more distortionary tax systems than the United States, the marginal social cost of additional government spending is even higher relative to direct budget cost.

Further, public sector enterprises that supply goods and services in competition with private sector enterprises or that might plausibly function as private sector enterprises (such as electric utilities and suppliers of transport services) should charge prices that reflect the true costs of the goods and services they supply (adjusted for externalities associated with consumption or production of these goods and services). Such user charges do not have the distortionary effects of taxation because they make the users recognize the cost of the particular good or service they are using. Normally, public sector enterprises should generate profits that reflect a fair rate of return on the capital that the public has invested in these enterprises. The profits should be returned to the public treasury, not squandered on employment of unnecessary personnel, on excessively high wage rates for workers, or on benefits and perquisites for their managers.

Special tax exemptions, rebates, and privileges frequently cause economic distortions. They increase, sometimes to a great extent, the disparity between tax rates on activities benefiting from them and on similar activities. There also is the need to replace by raising other taxes the revenue lost because of exemptions, rebates, and privileges. Moreover, once granted, special benefits often prove to be politically difficult to remove and may stimulate others to seek similar benefits.

In addition to taxes, many other government policies can harm economic performance by distorting economic incentives. Such policies include regulations of prices, wages, and interest rates. Policies

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that have maintained low prices of agricultural commodities in a number of developing countries have often discouraged agricultural production, thereby exacerbating problems of hunger and starvation while reducing the real income of rural families who are usually the poorest families in developing countries. Rent controls in both developing and developed countries generate housing shortages. Regulations that hold real wage rates above economic equilibrium levels contribute to unemployment among affected groups of workers. Restrictions on plant closings and work force reductions, such as have been used recently in some Western European countries, protect specific jobs for specific workers in the short run. However, they discourage workers who have protected jobs from seeking new jobs in which their social product (if not immediately their own income) would be higher. They also discourage creation of new jobs by making prospective employers fear that workers hired to expand output today will be a liability if demand contracts tomorrow.

Distortions also arise from controls on interest rates and credit allocations, especially in inflationary economies. Several developing countries have controlled nominal interest rates on deposits at financial institutions in the face of inflation rates that made real returns of such deposits substantially negative. This discouraged saving and investment and impaired the functioning of financial institutions as intermediaries of credit transactions. When real rates of return on savings were well below those on investment, financial institutions typically employed nonprice mechanisms for allocating the scarce supply of credit. Many factors other than the likely economic productivity of alternative investments can influence the allocation of credit in such an environment.

In its continuing studies of the effects of economic policies on economic growth, the World Bank has estimated for a number of developing countries the extent of economic distortions resulting from inappropriate exchange rates, protection of domestic manufacturing industries from import competition, protection or taxation of domestic agriculture, distortions of domestic capital markets, distortions of domestic labor markets, and distortions generated by inflation. The measures of these classes of distortions have been combined in a general distortion index, which has been related to measures of economic performance of developing countries in the 1970s. The results are summarized in Table 2–5. Countries with a low distortion index show a higher growth rate of real gross domestic product, a higher domestic savings ratio, a higher growth rate of industrial output, a higher growth rate of agricultural output, and a higher growth rate of exports than countries with a medium distortion index. Medium-distortion countries, in turn, show better economic performance in all of these categories than countries with a high distortion index.

TABLE 2-5.—*Price distortions and economic growth in the 1970s*

[Percent[1]]

Country category	Annual growth rate of GDP	Domestic saving/GDP ratio	Return on investment	Annual growth rate of agriculture	Annual growth rate of industry	Annual growth rate of export volume
Low-distortion countries	6.8	21.4	27.6	4.4	9.1	6.7
Medium-distortion countries	5.7	17.8	26.9	2.9	6.8	3.9
High-distortion countries	3.1	13.8	16.8	1.8	3.2	.7

[1] Averaged across countries.

Source: International Bank for Reconstruction and Development, *World Development Report, 1983*

MAINTAINING POLITICAL STABILITY

A final general lesson from the growth experiences of many countries over a long span of time is the importance of maintaining reasonable political and economic stability. Economic growth requires current sacrifice to obtain future reward. A political and economic system that does not provide reasonable assurance that those who make the sacrifices will enjoy a fair share of the reward will almost inevitably fail to generate much growth. This is apparent in countries where the insecurity created by war or political turmoil has caused economic stagnation or decline.

Even in less extreme circumstances, it is important that the political and economic system provide reasonable assurance that those who make the greatest contributions to economic progress enjoy a fair share of the fruits of that progress. This means that there is unlikely to be an absolutely even distribution of the benefits of economic growth. Those who work the hardest, save the most, exhibit the greatest skill and inventiveness, and provide the critical entrepreneurial efforts should be able to expect a greater share in the benefits of growth than those who make smaller contributions. On the other hand, economic "progress" that benefits only a very few, perhaps at the expense of a great many, is likely to prove unstable and ephemeral. Sustained economic growth requires the contributions of all elements of society and should be expected to benefit all elements of society.

The broad experience with economic growth and development over the past three decades demonstrates that rapid economic growth does benefit all of society, even if all do not benefit in the same proportion. A developing country that has enjoyed the average growth of real per capita income over the past three decades has more than doubled its real living standard. In some countries with average or better than average growth rates, real per capita incomes of the poorest 20 percent of the population may have risen relatively less than real per capita incomes of the richest 20 percent of the population. But even the poorest 20 percent have benefited substantially from general economic growth. Along the coastline of economic progress the tide may rise more rapidly in some places than in others, but, as President Kennedy observed, "A rising tide lifts all boats."

There is, of course, no absolute guarantee that countries will always achieve rapid rates of economic growth even if their governments recognize the importance of economic incentives, maintain reasonable fiscal discipline, sustain moderate inflation rates, pursue open policies with respect to international trade, keep exchange rates near economically appropriate levels, avoid excessive distortions of their domestic economies, and provide reasonable assurance that those who make the sacrifices necessary for economic progress enjoy a fair share of the benefits of such progress. At times adverse external economic conditions will make growth difficult even for countries with growth-oriented economic policies. Moreover, in the final analysis, successful growth and development do not depend only or primarily on government policies. They depend on the effort, investment, ingenuity, and enterpreneurship of the citizens of a country. The fundamental task for economic policy is to provide the essential environment of economic stability and the right framework of economic incentives so that these basic forces can have their full effect in generating economic progress. The experience of many developed and developing countries indicates that in the longer run societies where economic policies perform these essential tasks do enjoy the fruits of economic progress and the improvements in human welfare that flow from such progress.

POLICIES FOR THE INDUSTRIAL COUNTRIES AND THE INTERNATIONAL ECONOMIC SYSTEM

Developing countries operate in an economic environment influenced by the economic performance and policies of the industrial countries and by the international system that guides economic relationships among nations. The industrial countries contribute to successful economic performance of developing countries by maintaining rapid and sustainable rates of economic growth and reasonable price stability, and by supporting an open system of international trade and investment that serves the interests of all nations.

POLICIES OF THE ADMINISTRATION

The Administration has directed its economic policies toward these fundamental goals. The Administration has sought a monetary policy that reduces the inflation rate gradually from the high rate it inherited in 1981 to the moderate rates experienced over the past 3 years and ultimately to the zero rate consistent with price stability. The Administration has pursued a tax policy that reduces marginal tax rates in order to strengthen incentives for productivity and growth. The Administration is actively seeking additional tax reform that will further reduce marginal tax rates and equalize tax treatment of different forms of investment, again with the objective of supporting more rapid economic growth. To increase the efficiency of resource use, the Administration has reduced the burden of government regulation and is pursuing further deregulation. The Administration has opposed protectionist measures that conflict with the basic principles of an open system of international trade and has sought to persuade other nations to adopt more open trade policies. In cooperation with other nations, the Administration has pursued efforts to strengthen the international financial system and has recently proposed new initiatives in this important area.

As discussed in detail in Chapter 1, under Administration policies, the United States has enjoyed a sharp decline in inflation and a robust recovery from the world recession of 1980–82. In the other industrial countries, inflation rates also generally are down substantially from the high levels prevailing in 1979–81, but recovery from the world recession has been sluggish. In many industrial countries, unemployment rates have risen to levels not experienced since the 1930s. Fortunately, recent evidence suggests that unemployment rates in many of these countries have peaked and that future growth will at least keep them from rising.

POLICIES TO REDUCE STRUCTURAL RIGIDITIES

One favorable sign of the prospects for more rapid and sustainable growth in the industrial countries is the increasing consensus that to deal with chronic problems of slow growth and high unemployment, structural rigidities (especially in labor markets) must be reduced. In part, this is a task for government. Explicit or implicit subsidies to provide public services at artificially low prices or to maintain high-wage jobs in unprofitable industries must ultimately be financed by taxes that tend to reduce employment, investment, and growth in other industries. The same is true of overly generous benefits to unemployed workers, which may also reduce incentives for finding new employment. Restrictions on plant closing or work force reductions may, in the short run, diminish chances of unemployment for workers with jobs, but they probably also discourage new and existing firms from hiring more workers. The net result in the longer term is likely to be a less efficient distribution of the labor force and a lower level of total employment. Low-rent public housing and other heavily subsidized public services linked to residency in a particular area discourage labor mobility. Reform of these and other government policies that contribute to rigidities and inefficiencies of the economic system can contribute importantly to renewed growth.

From a broader perspective, the problem of structural rigidities must be addressed by all who participate in the economy and in the political system. The process of economic growth is not one in which each forward step benefits everyone or, at a minimum, harms no one. In a prosperous and growing economy, some industries expand while others contract. Some firms grow and earn above-average profits while others decline and confront bankruptcy. Some workers enjoy rapid increases in real wage rates and work overtime hours while others face real wage declines or unemployment. In the end, rigid insistence that such disparities should not exist is tantamount to insistence that rapid economic growth should not occur. The whole, vastly favorable experience with rapid economic growth in the postwar period demonstrates the error of such a posture. There is much to gain from reaching the social, political, and economic consensus necessary to move away from such a posture and toward more growth-oriented economic and social policies.

POLICIES FOR THE MULTILATERAL DEVELOPMENT BANKS

The recent and continuing problems of a number of heavily indebted developing countries suggest the desirability of further efforts to improve the international financial system. In considering these improvements, it is important to distinguish between the system of official lending and assistance, bilateral and multilateral, that serves the financial needs of both low- and middle-income developing countries, and the system of private lending and direct investment that supplies external capital primarily to middle-income developing countries. Given the problems that private creditors have recently experienced with loans to middle-income developing countries, it seems unlikely that private capital flows will anytime soon become the dominant source of external credit to low-income countries.

The Multilateral Development Banks (MDBs) are an important source of external credit and technical assistance to developing countries. The MDBs include the World Bank and its affiliates, the Inter-American Development Bank, the Asian Development Bank, and the African Development Bank. Aggregate new MDB loan commitments to both low- and middle-income developing countries currently run about $20 billion per year. MDBs loan to low-income countries on a concessionary basis, while they loan to middle-income countries at or near market interest rates.

MDB loans are concentrated in areas for which it would be difficult to attract private external credit, including agricultural development projects, education, health, transportation, and water and sanitation systems. MDBs also frequently provide technical assistance on project design and operation to countries with shortages of skilled personnel, and they help to catalyze resource flows to developing countries from private sources. To continue these generally worthwhile activities, it is necessary for the industrial countries to provide continued support to the MDBs, especially for their concessional lending activities. To serve these same ends, the United States has suggested that reflows to the IMF Trust Fund (estimated to be $2.7 billion over the next few years) be used to provide additional assistance to low-income countries pursuing policies to restructure their economies and improve prospects for growth.

MDB lending for industrial development projects and other projects that could be run as business enterprises (including some projects in the agricultural sector) raises issues that need to be carefully analyzed. A loan to finance a business investment is justified if that business can reasonably be expected to generate profits sufficient to repay the loan at an interest rate that appropriately reflects the scarcity value of capital. The scarcity value of capital in low-income developing countries is not the interest rate that MDBs charge on concessional loans, but rather is an interest rate that probably exceeds the rates charged on nonconcessional loans from these institutions. Moreover, in assessing the potential profitability of a prospective business investment, it is important to use appropriate "shadow pricing" techniques so that profitability is not artificially inflated by government policies that provide special privileges to a particular enterprise. For example, a textile mill or a fertilizer plant that is profitable only because a tariff protects it against competing imported products is not a worthwhile investment project based on an appropriate cost-benefit calculation.

MDBs also engage in "structural adjustment lending" to facilitate adoption of economic policies that provide a better environment for economic growth in the longer term but have significant costs in the short term. With respect to such lending, it is critical that the policies really do provide a better environment for economic growth and that these policies be implemented and maintained. Even for the poorest countries, additional resources made available through external loans do little long-run good if economic policies do not create an environment conducive to economic growth.

For most of the middle-income developing countries that have been the focus of the international debt crisis, lending from MDBs and other official sources has provided a relatively small part of external credit. Much of the external credit to countries involved in the debt crisis has come from private sources, especially from commercial banks in the developed countries. A key element in the problems of these countries has been the decline in confidence of their creditors concerning their ability to meet their debt-service obligations. These doubts affected not only foreign creditors who became reluctant to extend new loans or extend the terms of existing loans, but also domestic investors who sought safer foreign havens for their capital.

The key requirement for resolving the problems of these debtor nations is their adoption of economic policies that support sustainable growth and structural adjustment and afford to their creditors (foreign and domestic) confidence of receiving a fair rate of return on their capital. Absent such a return of confidence, based upon a genuine improvement in prospects for future economic growth, further extensions of credit from external sources, official or private, are at best a short-run palliative. If domestic residents cannot be persuaded to keep their capital at home and return some that they have moved abroad, there is little hope that foreign investors can be induced to fill the gap for very long.

The industrial countries, including the United States, can make a substantial contribution to resolving the problems of the debtor countries by supporting an environment conducive to the economic growth of developing countries. This means maintaining rapid and sustainable rates of economic growth and reasonable price stability in the industrial countries, and supporting an open international economic system that allows developing countries to grow and to meet their external obligations.

In addition, the industrial countries recognize that debtor countries pursuing appropriate policies supportive of economic growth and balance of payments adjustment require access to external credit adequate to finance implementation of these policies. Specifically, at the Williamsburg Summit in 1983 and the London Summit in 1984, the six major industrial countries agreed that the problems of debtor countries need to be addressed on a case-by-case basis in accord with the following principles: (1) Debtor countries need to adopt policies that will adjust their economies to the realities of their external payments situations. (2) Sustained growth and maintenance of open markets in the industrial countries are important for the successful resolution of the problems of many debtor countries. (3) The IMF should have adequate resources to play its important role in providing credit and arranging programs for stabilization and adjustment in debtor countries. (4) Continued commercial bank lending is necessary and appropriate for countries making determined adjustment efforts. (5) Bridge financing from central banks should be provided when necessary to facilitate agreement on suitable adjustment programs.

More recently, at the IMF/World Bank Annual Meeting in Seoul in October 1985, the U.S. Secretary of the Treasury, proposed a Program for Sustained Growth that builds upon the principles established at the economic summits to foster growth and adjustment of developing countries. The program embodies three main elements: adoption by debtor countries of macroeconomic and microeconomic policies to promote growth, reduce inflation, and secure balance of payments adjustment; continued central involvement of the IMF in the arrangement of stabilization and adjustment programs, supplemented by structural and sectoral assistance lending by the multilateral development banks; and increased lending by commercial banks. The program calls for a 50 percent increase in loan disbursements by the MDBs and for $20 billion of new loan commitments by commercial banks to a core group of 15 debtor nations over the next several years. These disbursements and loans will be tied to comprehensive economic reforms by the borrowers and to continued commercial bank lending to other developing countries that pursue appropriate policies.

Additional commercial bank lending will be required over the next few years to meet the financing needs of debtor countries pursuing appropriate policies. In the longer term, however, it would be desirable to reduce problems arising from the mismatch between the nature of the investment undertaken by developing countries and the nature of the external obligations issued to finance part of this investment. Developing countries have financed long-term equity investments in their own economies with short-term, foreign-currency-denominated, government-guaranteed, floating-interest-rate loans from large international commercial banks. If these bank loans had instead taken the form of equity investments, like common stocks, the effect of the adverse developments of the early 1980s would have been partly absorbed by foreign holders of these equities. If bank loans to developing countries had instead taken the form of long-term bonds, then at least the effect of the increase in market interest rates would have been absorbed by the bondholders in the form of a decline in the market value of their bonds. In addition, if the bonds were not government guaranteed, then the bondholders would have absorbed the increase in default risk associated with a deterioration in economic conditions.

Of course, potential foreign investors would require higher expected rates of return to compensate for the increased risks associated with equity investments or long-term, nonguaranteed bonds. A developing country that seeks to finance part of the expenses of its growth with foreign capital simply must decide whether it wishes to pay a higher expected return to foreign investors to induce them to bear part of the risk inevitably associated with any economic endeavor, or whether it wishes to absorb all the risk itself and pay a lower, but fully assured, return to foreign investors. It is relevant to note that most of the capital inflow into the United States in the 19th century took the form of foreign investments in securities issued by private sector enterprises, especially railroad bonds. Holders of these securities were exposed to some risk from interest rate fluctuations and from the possibility of default, but presumably were offered returns that compensated for these risks.

To encourage an appropriate share of equity investment in total credit flows to developing countries, it is important that creditor countries avoid policies that distort the nature of these credit flows. These distortionary policies include restrictions on foreign investment adopted in misguided efforts to protect domestic jobs. It is also especially important that developing countries desiring increased equity investment create an environment favorable to such investment. National treatment of foreign firms and investors (that is, treatment on the same basis as domestic firms and investors) generally contributes to such an environment. In contrast, differential taxation of domestic and foreign investors or enterprises, special limitations on the activities of foreign-owned firms, restrictions on repatriation of earnings, export performance requirements, insistence on domestic participation in or control over subsidiaries of foreign enterprises, and inadequate protection of patents, licenses, and intellectual property rights generally do not support such an environment.

POLICIES TO STRENGTHEN THE OPEN SYSTEM OF TRADE

In the area of international trade policy, there is the need to forestall new efforts at protectionism and to roll back protectionist measures in both developed and developing countries. The next chapter discusses the fallacies in arguments used to support protectionism. Here, it is important to stress the essential link between an open world trading system and the ability of many developing countries to meet their external payment obligations. Payment of just the interest on the external debts of indebted developing countries, without any new net borrowing, currently requires that these countries generate payments surpluses (primarily from net exports) of about $80 billion per year. Even with a substantial flow of new net lending, payment of a significant fraction of the interest on already outstanding loans requires that indebted developing countries generate substantial net export surpluses. Generation of such surpluses depends on the ability of debtor countries to sell their products in the markets of creditor countries.

Opposition to protectionism and support of the open system of world trade is in the community interest of all nations. In most countries, from time to time, strong political pressures arise to adopt protectionist measures that serve the interests of special groups, even though they do not serve the general interest. The ability to resist such pressures is strengthened when the international ethic supporting an open trading system is strong, and is weakened when other governments yield to special interests or adopt protectionist measures for other misguided reasons.

In this regard, the role of developing countries should not be ignored. Most rapidly growing developing countries have benefited substantially from the open system of international trade and investment. They have not, however, always been assiduous in abiding by the rules and adopting the ethic of that system. This is true not only for trade policies, where some developing countries have ignored or claimed exemption from the rules of the General Agreement on Tariffs and Trade, but also for important issues like the rules governing foreign investment and protection of patents and intellectual property rights. Such lapses once received little attention. As the economic importance of these countries grows, these lapses pose an increasing threat to the open system of international economic relations.

The extraordinary postwar record of economic progress under this open system of international trade and investment demonstrates the substantial benefits that this system provides to all nations. The United States, as the principal sponsor and supporter of this system, has a special interest in, and responsibility for, its preservation and improvement. Other nations, including many developing nations that have progressed rapidly under this open international economic system, share this interest and responsibility.

CHAPTER 3

Protectionism and the United States in the World Trading System

TRADE AMONG NATIONS benefits buyers and sellers alike. Adam Smith made this point more than 200 years ago when he attacked the mercantilist view that only the exporting nation gains from trade. Although the world trading system has never been entirely free, most observers agree that freer trade promotes more rapid growth, improves the use of a nation's resources, encourages innovation, and ensures a higher standard of living for all trading partners. A bipartisan consensus over the past 50 years has enabled the United States to lead the world toward a more open trading system.

On September 23, 1985, the President, in reconfirming the U.S. commitment to free trade, stated that, "if trade is not fair for all, then trade is 'free' in name only." This Nation benefits from free trade, but it particularly gains when trading partners also open their markets. Consequently, the Administration has rejected new calls for protectionism and has placed primary emphasis on reducing foreign barriers that restrict U.S. exports.

Nevertheless, protectionist bills have been introduced in the Congress in large numbers during the past year. Many of their supporters have focused on the current large trade deficit or on the decline of manufacturing employment compared to 1979. The remedy often proposed to deal with these situations is greater restriction of trade. Consequently, one purpose of this chapter is to analyze popular arguments for increased protectionism. The case for protectionism is found to be a misleading basis for policy.

A second purpose is to review recent trade policy developments affecting the following areas: footwear, steel, textiles, semiconductors, and agricultural exports. These examples do not exhaust the number of industries facing intense international competition, but raise representative policy issues addressed recently. The discussion of these examples suggests when trade intervention is not likely to be successful in promoting U.S. production in the intended industry and what costs are likely to be imposed on U.S. consumers, taxpayers, and other industries.

A third purpose is to explain the rationale behind the Administration's Trade Policy Action Plan. The policy requires interrelated actions by the United States and by its trading partners to ensure free and fair trade. Several aspects of the plan are discussed here. Major goals include promoting multilateral efforts to reduce current trade barriers, extending international trade rules to situations currently not covered, ensuring fair trade through rigorous enforcement of current trade laws and agreements, and assisting workers to adjust to changing patterns of world trade. An additional aspect of the plan, the pursuit of policies to promote more balanced world growth and thereby to reduce the current trade deficit, is discussed in Chapter 1.

CLAIMS FOR PROTECTIONISM

In spite of the generally recognized benefits of an open trading system, some argue for a broad reversal of this policy and for increased government control over international trade. For example, legislation has been introduced to impose both general and country-specific import surcharges to reduce the trade deficit. Some commentators blame increases in this deficit for massive job losses and a reduction in the U.S. growth rate. Others argue that the deficit is deindustrializing the economy and eliminating manufacturing jobs. These arguments are based on an inadequate understanding of the benefits of trade and of changes occurring in the U.S. economy. The remedies suggested are likely to be costly and inappropriate.

PROTECTIONISM AND THE TRADE DEFICIT

In the first 9 months of 1985 the U.S. merchandise trade deficit, the excess of imports over exports of goods, was about $114 billion at an annual rate. The current account deficit, which also includes transfer payments and trade in services, was about $110 billion. Some suggest that if this deficit were curtailed and spending were shifted to domestic goods through the imposition of a general import surcharge, the United States would benefit from expanding national output. Others elaborate on this argument by claiming that a surcharge would lower the value of the dollar, a step that would make domestic tradable goods more attractive.

Such a policy would be misguided for several reasons. In particular, it ignores the macroeconomic factors that determine the current account balance. Because the current account deficit represents an inflow of funds into the United States when domestic investment exceeds domestic saving, any successful policy to reduce this deficit must alter the underlying saving and investment incentives in the United States and abroad. Reliance on protectionism to reduce the trade deficit by increasing the relative price of imports is unlikely to succeed. An import surcharge will reduce spending on imports, but in a world with flexible exchange rates and unchanged saving and investment incentives, the U.S. dollar will appreciate. As a result, exports will decline and imports will fail to decline as much as if exchange rates remained unchanged. The surcharge primarily introduces an inefficiency into the economy, which in turn reduces national income.

The most significant impacts of a surcharge are likely to be distributional. Returns to resources used primarily in the production of import-competing goods tend to rise, while returns to resources used primarily in export industries tend to fall. There will be an incentive to shift resources out of export industries into import-competing industries. Reduced imports in industries such as apparel, steel, and autos are likely to be offset by reduced exports from industries such as aircraft, chemicals, and machinery. A significant reduction of the trade deficit is unlikely.

An import surcharge is a particularly undesirable way of attempting to reduce the trade deficit because of likely foreign retaliation. The United States is not a small country whose actions will be ignored by others. When foreigners retaliate, they can be expected to choose U.S. export sectors that are particularly vulnerable and subject to intense foreign competition, such as agriculture.

While a general surcharge will not be particularly effective in reducing the trade deficit, a surcharge directed against a few countries promises even less chance of success. Countries exempted from the surcharge would tend to increase sales to the United States. Countries subject to the surcharge would divert their exports to markets previously served by the exempt suppliers. Such a policy might disrupt trade initially, but eventually it would have a minimal impact on the overall U.S. trade balance unless the targeted countries happened to produce goods with few substitutes and few alternative sources of supply.

A surcharge is unlikely to have even a short-run economic payoff, but it has considerable potential to alienate major trading partners and to set in motion market-closing measures on a worldwide scale. Because the current account balance is determined primarily by macroeconomic relationships, a commercial policy such as a surcharge is particularly unsuited to eliminating the present U.S. trade deficit.

PROTECTIONISM AND JOBS

Many argue that an import surcharge will save jobs. For example, some observers claim that each additional billion dollars worth of imports costs 25,000 to 30,000 jobs. Behind this assertion is the implication that reductions in imports must lead to greater spending on domestic goods. Protection may save jobs in import-competing industries, but this is likely to be matched by the less visible loss of jobs elsewhere in the economy. For example, a decline in U.S. exports can be expected when the dollar appreciates, but also when foreign countries earn less from their sales to the United States. The loss of exports will be particularly severe if foreign countries close their markets in retaliation against the U.S. surcharge.

One measure of whether current economic policy is costing jobs is the change in total employment in the economy. By that standard U.S. performance has been exceptional in recent years. The expansion of imports has not come at the expense of aggregate employment in the United States. Civilian employment has grown substantially and 8 million more people were employed at the end of 1985 than when the President took office. Such a record stands in contrast to those of other developed countries, many of which are running trade surpluses but which have failed to add significantly to their employment.

Inadequate employment growth can foster bad economic policy as countries adopt costly measures in an attempt to preserve existing jobs. All too often these efforts introduce rigidities and inefficiencies into the economy. Trade barriers, subsidies, and plant closing regulations are adopted in spite of market signals indicating that patterns of demand have shifted or that an industry's international competitiveness is declining. Other potentially competitive industries become so burdened with higher taxes and inflated input costs that they no longer offer the prospect of long-run growth. Ironically, the very goal of job preservation becomes less attainable when governments resort to greater protectionism and subsidization of politically powerful industries.

PROTECTIONISM AND DEINDUSTRIALIZATION

As shown in Chapter 1, goods production has accounted for a remarkably constant share of U.S. output. Nevertheless, in some major export- and import-competing industries, output has declined or has expanded less rapidly than in the rest of the economy. Total employment within manufacturing has not regained the level reached in 1979. Some commentators view these circumstances as symptoms of the deindustrialization of America. By failing to consider the rise in manufacturing productivity and output, this reasoning mistakenly attributes to the trade deficit changes in the observed pattern of input usage that have been caused by other factors.

Manufacturing Output Performance

Strong U.S. economic growth has allowed both imports and domestic output of manufactured goods to rise. Additionally, strong domestic demand can divert U.S. production from export markets. Increases in the trade deficit and the import share of the domestic market (the import-penetration ratio) do not indicate a weakened domestic industrial capability; in fact, U.S. manufacturing output has expanded. In particular, over the 1982–84 period, the import-penetration ratio for all manufactured goods rose from less than 9 percent to nearly 11 percent, and manufactured exports as a share of shipments declined from 8.8 percent to 7.6 percent. Nevertheless, U.S. industrial production in manufacturing rose 7.8 percent in 1983 and 12.4 percent in 1984. The 1984 performance allowed total manufacturing output to surpass the past peak established in 1979, and in 1985 manufacturing output continued to expand, although at a slower rate.

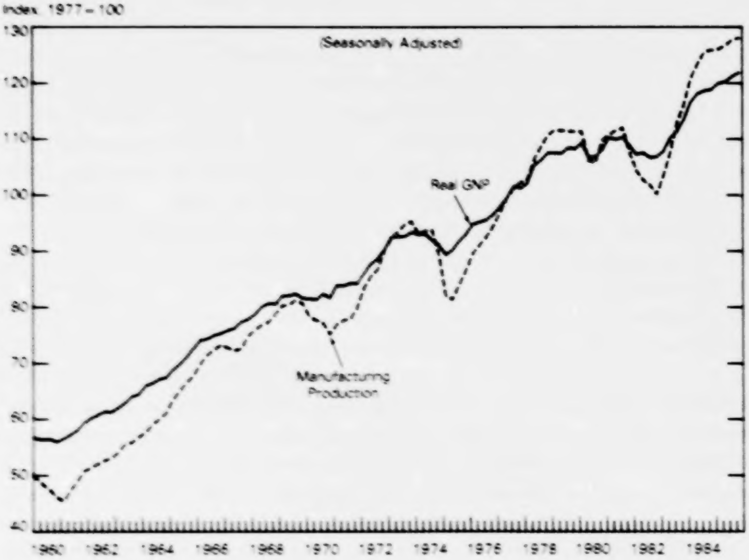
The index of industrial production in manufacturing is shown in Chart 3–1, together with the gross national product (GNP). Manufacturing production is more variable than total production over the business cycle, generally falling more in recessions and rising more in expansions. The economic decline in 1982, followed by an exceptionally strong recovery in 1983–84, is quite consistent with this pattern. The fact that manufacturing output has grown steadily with the economy is reflected by the very narrow band in which manufacturing's share of GNP has fluctuated over the past two decades, from 20 to 22 percent. There has been no radical shift in demand away from U.S. manufactured goods, nor has growing international competitive pressure substantially altered this relationship. Sales lost in import and export markets have been offset by the expansion of manufacturing output necessary to satisfy greater domestic consumption, investment, or government purchases.

Manufacturing Input Usage

Strong growth in manufacturing output during the current expansion has not required proportionate increases in capital and labor inputs. Such reductions in input requirements per unit of output are what allow increases in U.S. wage rates and the standard of living. In the case of labor, annual growth of output per hour worked (labor productivity) in manufacturing was 2.6 percent from 1948 to 1984. This exceeds the corresponding economy-wide rate of 1.6 percent, and helps explain why manufacturing's share of total employment has fallen steadily over the past three decades. Furthermore, the relatively more rapid growth of labor productivity in manufacturing has been accompanied by a more rapid rise in manufacturing wages than those

Chart 3-1

Manufacturing Production and Real GNP



Note.—Index for real GNP based on data in 1982 dollars.

Sources: Department of Commerce and Board of Governors of the Federal Reserve System.

in the rest of the economy. For example, average hourly earnings in manufacturing were 5 percent greater than in the economy as a whole in 1969, but this differential rose to 9 percent in 1979 and 11 percent in 1985.

One reason labor productivity has increased is the substitution of capital for labor. The capital-labor ratio in manufacturing was two and one-half times as great in 1984 as it was in 1948. However, as shown in Table 3-1, during the most recent expansion both capital and labor requirements per unit of output have fallen. A possible explanation of this result is technological improvement, generated by the electronics revolution in particular, which has allowed major input savings. Also, the composition of output within manufacturing has changed, shifting toward industries that appear best able to take advantage of newer, more efficient technologies.

Manufacturing employment may well continue to decline as productivity grows, especially if the wage gap in favor of manufacturing

TABLE 3-1.—*Manufacturing sector indicators, 1973-84*

Year	Import penetration (percent)[1]	Industrial production (1977=100)	Employment (thousands)[2]	Productivity (1977=100)[3]	Average hourly earnings (dollars)[4]	Real net capital stock (billions of 1982 dollars)[5]
1973	6.2	94.0	20,154	93.4	4.09	554.2
1974	7.2	92.6	20,077	90.6	4.42	581.1
1975	6.5	83.4	18,323	92.9	4.83	597.2
1976	6.7	91.9	18,997	97.1	5.22	612.5
1977	6.9	100.0	19,682	100.0	5.68	630.5
1978	7.8	107.1	20,505	101.5	6.17	655.1
1979	7.9	111.5	21,040	101.4	6.70	681.4
1980	8.2	108.2	20,285	101.4	7.27	707.2
1981	8.5	110.5	20,170	103.6	7.99	729.7
1982	8.9	102.2	18,781	105.9	8.49	741.3
1983	9.3	110.2	18,434	112.9	8.83	741.1
1984	10.9	123.9	19,412	118.5	9.18	752.9

[1] Imports as percent of manufacturers' shipments plus imports minus exports; based on value data.
[2] All employees; establishment data.
[3] Output per hour of all persons.
[4] For production workers.
[5] End of year. Based on data to be published in *Survey of Current Business*.

Sources: Department of Commerce (Bureau of Economic Analysis and Bureau of the Census), Department of Labor (Bureau of Labor Statistics), and Board of Governors of the Federal Reserve System.

widens. This outcome cannot be blamed on the trade deficit. Rather, this process of change is similar in many respects to the profound restructuring of the U.S. agricultural sector that has occurred over the past century. Compared with the situation 60 years ago, real agricultural output is now two and one-half times as great, but rising productivity has resulted in farm employment falling to less than one-third of its level in the 1920s.

A decline in sectoral employment need not signal a lack of efficiency or the inability of U.S. producers to compete internationally. Instead, it can be part of the process whereby U.S. producers become more efficient and competitive. Furthermore, in a competitive market productivity will grow as firms introduce new technologies when they become economically profitable, regardless of whether those technologies give a competitive advantage over other U.S. producers or over foreign producers.

RECENT AND PROSPECTIVE TRADE POLICY ACTIONS

The Administration has taken several trade policy actions in the past year that affect particular industries. A review of these actions demonstrates the variety of international competitive pressures confronted by U.S. producers and the extent to which government intervention may be ineffective in alleviating these pressures, especially in the long run. The effects of these actions on domestic consumers, taxpayers, and producers in other industries are also discussed, as are relevant U.S. international economic interests.

In 1985 the President rejected the domestic industry's petition for import relief brought under Section 201 of the Trade Act of 1974. The President concluded that import barriers would impose substantial costs on U.S. consumers and reduce U.S. exports, while likely saving jobs in the domestic industry only on a temporary basis. The Congress subsequently passed legislation to reduce footwear imports as part of a textile trade bill, but the President vetoed it. To evaluate this series of actions, it is necessary first to understand the background of Section 201 in general and then of the circumstances in the footwear industry.

Section 201 contains procedures for providing temporary protection to import-sensitive industries for the purpose of promoting adjustment to a loss of competitiveness internationally. This statute, and its counterpart in the General Agreement on Tariffs and Trade (GATT), are referred to as the "escape clause," because no demonstration of unfair trade practices is necessary to justify temporary protection. Rather, Section 201 specifies conditions under which temporary relief can be granted to an industry that has been seriously injured (or threatened with serious injury) by imports. In such cases, the International Trade Commission (ITC) determines whether the industry has been seriously injured and whether imports have been a substantial cause of this injury. If so, the ITC recommends to the President the appropriate remedy to promote adjustment by the domestic industry.

The President considers a broader set of criteria in determining what method and amount of relief, if any, is in the national interest. These factors include effects on consumers, international economic interests of the United States, the probable effectiveness of relief in promoting adjustment, the consequences on other industries if compensation is granted to foreign countries, and the economic costs incurred by workers and communities if import relief is or is not provided. If the President decides that some form of import relief is in the national interest, he is statutorily limited to granting a maximum of 8 years of protection. The domestic industry that emerges from this adjustment period is expected to be fully competitive with foreign producers.

Since 1975 the ITC has ruled on 55 escape clause relief petitions. The Commission recommended trade relief in 32 cases, and the President granted some form of trade relief in 13. Because the ITC and the President are charged with different responsibilities in Section 201 cases, this record of divergent views over the appropriateness of relief should not be surprising. Nevertheless, the Congress is considering legislation to ensure that a finding of injury to an industry results in relief being granted. Other proposals would further amend conditions for relief and require only that imports be a cause, although not a substantial cause, of injury to the industry. Steps in this direction would result in an unbalanced assessment of trade policy, because they ignore the many other effects the President is charged to consider.

In the case of the nonrubber footwear industry, the prospects for industry revitalization could be inferred in part from the escape clause relief provided from 1977 to 1981. Orderly marketing agreements limited shipments from the two major suppliers, Taiwan and Korea. Growth in the quantity of imports slackened, although the effect on the import-penetration ratio measured in value terms was less pronounced. No increase in real investment to retool the industry occurred, while labor productivity actually fell. As shown in Table 3-2, employment declined less rapidly. But this industry is one of the most labor intensive in the manufacturing sector, and the opportunity to reduce labor costs substantially through greater capital investment is limited to only a few products. It is not surprising that protection did not enable most segments of the industry to become competitive with foreign producers who can pay much lower wages. Moreover, U.S. quotas gave foreign producers an incentive to reduce shipments of low-cost merchandise and to expand exports of higher quality footwear that competes more directly with U.S. production. Such incentives tend to undermine the efforts of U.S. firms to remain competitive when protection is removed.

Table 3-2.—*Manufacturing sector indicators: Nonrubber footwear, 1973–84*

Year	Import penetration (percent)[1]	Output (millions of pairs)	Employment (thousands)[2]	Productivity (1977 = 100)[3]	Average weekly earnings (dollars)[4]	Profitability (percent)[5]
1973	18.0	490.0	183	98.5	103.09	(6)
1974	17.8	453.0	172	96.8	106.43	(6)
1975	20.7	413.1	158	101.3	113.34	(6)
1976	22.8	422.5	164	102.1	121.97	(6)
1977	23.4	418.1	157	100.0	127.37	(6)
1978	32.5	418.9	158	102.5	138.38	(6)
1979	34.4	398.9	149	100.2	148.06	(6)
1980	30.9	386.3	144	99.1	161.33	29.8
1981	31.3	372.0	146	95.6	174.97	31.4
1982	37.2	359.1	135	97.3	179.71	27.5
1983	41.6	344.3	126	102.0	190.77	29.4
1984	49.8	298.5	116	(6)	196.02	18.2

[1] Imports as percent of manufacturers' shipments plus imports minus exports; based on value data; 1984 estimated.
[2] All employees; establishment data.
[3] Output per hour of all employees.
[4] For production workers.
[5] Net income before taxes as percent of net worth.
[6] Not available.

Sources: Department of Commerce (Bureau of the Census), Department of Labor (Bureau of Labor Statistics), and International Trade Commission.

With respect to the most recent footwear cases brought in 1984 and 1985, domestic output again has fallen. The reduction in domestic capacity has been quite responsive to market signals; the return on operations for those still in the industry more than matched the return on equity in all manufacturing. Protectionism may raise the return to these successful producers, but it seldom results in the reopening of outmoded plants that already have closed.

Trade intervention has become an increasingly expensive way of attempting to save jobs in the footwear industry. As imports account for a larger share of the market, quotas that drive up import prices are more likely to result in large increases in profits for foreign producers than for domestic producers.

In summary, the President's decision to deny relief to the footwear industry recognized that its contraction represents an adjustment to world market forces that are not a temporary but a permanent source of competitive pressure. Any efforts to reverse this process would be exceedingly expensive for American consumers and at the same time would deny market access to many debt-ridden developing countries. The Administration is committed to effective use of Section 201 provisions, but only where that use can be expected to promote successful adjustment and further the national interest.

STEEL

Several bilateral export restraint agreements were negotiated with foreign steel producing countries in 1985 as part of the President's steel plan. An earlier agreement with the European Community (EC) covering finished steel was renegotiated, but the United States unilaterally imposed import quotas on semifinished steel from the EC. These steps were the latest in a series of trade actions involving the steel industry.

Over the 1970s, steel production facilities in the United States and Europe became increasingly outmoded relative to those in Japan and other recent entrants in the market. Many European governments intervened with large infusions of funds to restructure their domestic industries. The U.S. industry was partially insulated from the effects of growing world capacity as the result of a boom in steel demand in 1974, the depreciation of the U.S. dollar, and various protective schemes: voluntary restraint agreements to limit the quantity of imports and a trigger price mechanism to prevent foreign dumping of steel in the U.S. market at prices below costs of production.

As shown in Table 3–3, import penetration in the 1970s remained significantly below subsequent values in the 1980s. Since the mid-1970s, real gross investment declined, as investors apparently anticipated greater profits elsewhere in the economy. At the same time, wages rose very rapidly, at an average annual rate of 10 percent over the decade, and in relative terms increased from 45 percent above all

U.S. production workers' average weekly earnings in 1969 to 95 percent in 1979. Growth in labor productivity was less than the manufacturing average, and from 1973 to 1979 productivity rose at less than one-tenth of 1 percent a year. The sharp rise in unit labor costs suggests why the industry's competitive position did not improve over the decade, in spite of dollar depreciation and measures to restrict imports.

TABLE 3-3.—*Manufacturing sector indicators: Steel, 1965–84*

Year	Import penetration (percent)[1]	Output (millions of short tons)	Apparent consumption (millions of short tons)[2]	Employment (thousands)[3]	Productivity (1977=100)[4]	Average weekly earnings[5]		Real gross investment (millions of 1982 dollars)[6]	Rate of return on equity (percent)[7]
						Dollars	Ratio to total private nonagricultural		
1965	(8)	92.7	100.5	657	87.5	140.90	148	4,980	(8)
1966	(8)	90.0	99.0	652	89.2	144.73	146	5,210	(8)
1967	(8)	83.9	93.7	635	86.4	143.51	141	5,540	(8)
1968	(8)	91.9	107.6	636	89.5	154.16	143	5,630	(8)
1969	(8)	93.9	102.7	644	90.0	166.03	145	4,860	(8)
1970	7.8	90.8	97.1	627	87.6	166.40	139	4,150	(8)
1971	9.8	87.0	102.5	574	91.9	177.80	140	3,040	(8)
1972	9.6	91.8	106.6	568	97.3	206.25	151	2,470	(8)
1973	8.1	111.4	122.5	605	106.6	229.77	158	2,820	(8)
1974	10.6	109.5	119.6	610	106.5	258.95	167	4,000	17.0
1975	10.6	80.0	89.0	548	93.3	274.13	168	5,390	10.9
1976	9.0	89.4	101.1	549	99.0	305.88	174	5,090	9.0
1977	10.8	91.1	108.5	554	100.0	338.58	179	4,380	3.6
1978	11.4	97.9	116.6	561	108.3	389.69	191	3,670	8.9
1979	10.4	100.3	115.0	571	106.9	428.89	195	4,140	8.8
1980	10.9	83.9	95.2	512	102.9	448.77	191	4,050	9.0
1981	13.8	88.5	105.4	506	112.0	509.04	199	3,700	11.5
1982	16.8	61.6	76.4	396	90.9	505.97	189	3,780	−14.5
1983	12.3	67.6	83.5	341	116.8	509.16	181	3,200	−17.4
1984	16.7	73.7	98.9	334	132.0	527.39	179	3,440	6

[1] Imports as percent of manufacturers' shipments plus imports minus exports; based on value data.
[2] Manufacturers' shipments plus imports minus exports.
[3] All employees; establishment data.
[4] Output per hour of all employees.
[5] For production or nonsupervisory workers.
[6] Expenditures for new plant and equipment.
[7] Profits after taxes as percent of average stockholders' equity for the year.
[8] Not available on same basis as for later years.

Sources: Department of Commerce (Bureau of Economic Analysis and Bureau of the Census), Department of Labor (Bureau of Labor Statistics), and International Trade Commission.

A countervailing duty case brought against several European steel producers in 1982 was an important application of the GATT subsidies code to address the competitive effects of European government assistance programs. A Department of Commerce investigation disclosed large subsidy margins for several nationalized producers. However, the United States did not impose countervailing duties and agreed to the European request for a negotiated settlement. The EC was thereby able to allocate U.S. market shares to member countries consistent with its own restructuring plan. The subsequent limitations on Europe's market share were intended to reduce the ability of subsidized imported steel to drive down prices in the U.S. market. To the extent that U.S. prices rose, they benefited not only U.S. producers, but also foreigners able to sell in the U.S. market. Although the volume of European sales declined, each ton would be sold at U.S. market prices and not at lower world prices. However, increased sales by uncontrolled suppliers would limit the extent of this U.S. price increase.

Total U.S. demand for steel has fallen considerably since 1979, as more products are designed to require less steel, and patterns of demand have shifted away from traditional products requiring relatively more steel toward electronically based capital goods and consumer products requiring less steel. Controlling European sales alone has not been sufficient to avoid substantial declines in domestic output and employment. The President rejected the relief proposed by the ITC in a Section 201 case in 1984. Instead, the Administration negotiated voluntary export restraints with 16 countries based on the stated goal of limiting imports of unfairly traded steel and preventing diversion of steel to the United States from other markets. Several countries have requested such agreements to ensure themselves a share of the U.S. market and to obtain immunity from unfair trade actions. These agreements will expire in 1989.

The U.S. steel industry continues to contract. Some diversification into other areas, such as oil and gas, has occurred. Traditional integrated producers have been challenged not only by imports but also by domestic minimills. The emergence of minimill producers, who generally roll particular finished steel products from semifinished steel, indicates that U.S. producers may be more competitive in some stages of steel production than in others. The below-average returns reported by large integrated producers suggest that their retrenchment and diversification are appropriate. The extent of industry contraction will be influenced not only by the reduction in steel usage, but also by the behavior of U.S. costs of production. Labor productivity has risen sharply since 1982. Recent moderation in wage demands and flexibility over work rules will contribute toward a less severe contraction of the domestic industry. Progress in these areas will be critical if the domestic industry is to adjust successfully by the termination of the President's steel plan.

TEXTILES AND APPAREL

One of the most visible trade policy confrontations in 1985 was the passage and subsequent veto of the Textile and Apparel Trade Enforcement Act. In 1986 the renegotiation with foreign countries of current export restraint agreements will be especially significant.

U.S. trade in textiles and apparel has been governed for many years by an extensive set of bilateral quota agreements. These two industries receive protection under the MultiFiber Arrangement

(MFA), a multilateral agreement that can be traced back to the 1950s and is scheduled to be renegotiated in 1986. Production in both industries has risen above its past cyclical peak, as shown in Table 3-4. In 1983 and 1984, profitability in the textile industry rose substantially to a level comparable to that of all manufacturing. Both industries have received considerable public attention due to declining employment, which is attributable primarily to sharply rising labor productivity rather than to a decline in output. Over the period 1974 to 1982, output per hour worked rose 4.4 percent annually in textiles, 2.9 percent in apparel, and 2.0 percent in all manufacturing. The growth in labor productivity has coincided with higher total multifactor productivity, a measure of output per unit of combined capital and labor inputs. The capital stock has declined from its 1978 peak. Investment in new equipment appears to embody more productive technologies that have allowed output to grow even as labor and capital input requirements fall. Any policy to slow down this rate of technological change would tend to result in a less competitive domestic industry.

TABLE 3-4.—*Manufacturing sector indicators: Textiles and apparel, 1973–84*

Year	Import penetration (percent)[1]		Real output (billions of 1982 dollars)[2]	Employment (thousands)[3]	Productivity (1977=100)[4]		Real net capital stock (billions of 1982 dollars)[5]	Textiles: Rate of return on equity (percent)[6]
	Textiles	Apparel			Textiles	Apparel		
1973	4.5	7.1	30.5	2,448	80.2	89.1	26.0	(7)
1974	4.3	7.6	28.2	2,328	80.7	88.5	26.8	8.0
1975	3.6	8.3	27.3	2,111	89.6	94.5	26.6	4.3
1976	3.8	10.3	31.0	2,237	91.8	94.5	26.5	8.0
1977	3.7	10.0	34.4	2,227	100.0	100.0	26.7	8.6
1978	4.3	12.1	35.1	2,231	102.3	104.2	26.9	11.5
1979	4.1	12.4	35.7	2,189	104.8	98.1	26.8	12.0
1980	4.3	12.9	36.2	2,111	104.7	97.3	26.7	8.5
1981	4.9	13.8	36.1	2,067	106.6	103.6	26.3	9.5
1982	4.6	13.9	33.7	1,911	113.7	111.0	25.6	6.9
1983	4.7	15.4	37.3	1,905	(7)	(7)	24.6	12.0
1984	6.1	20.2	38.5	1,943	(7)	(7)	24.3	11.2

[1] Imports as percent of manufacturers' shipments plus imports minus exports; based on value data; 1984 estimated.

[2] Real gross domestic product.

[3] All employees; establishment data.

[4] Output per hour of all employees; based on unpublished data from Bureau of Labor Statistics.

[5] End of year. Based on data to be published in *Survey of Current Business*.

[6] Profits after taxes as percent of average stockholders' equity for the year.

[7] Not available on same basis as for later years.

Sources: Department of Commerce (Bureau of Economic Analysis and Bureau of the Census) and Department of Labor (Bureau of Labor Statistics).

Industries seeking import relief generally prefer quotas, such as the MFA provides, rather than tariffs. The protective effect of a quota is less likely to be offset by dollar appreciation or declining domestic cost competitiveness. Nevertheless, imports still can surge rapidly over a short time period, as textiles and apparel imports did in 1983 and 1984, for several reasons. Quotas may not be binding initially, not all product categories from a controlled country may be covered, not all countries may be controlled, or not all substitute fibers may be controlled. In the case of the MFA, a source of uncertainty has been the rapid growth of sales by the EC and Canada, which are not controlled. The United States does not face quotas in their markets either and as recently as 1980 was a net exporter of textiles.

In spite of the apparent ease of expanding imports in recent years, even from countries controlled by the MFA, foreign traders have been willing to pay increasingly more for the right to export to the U.S. market. In Hong Kong, where quota rights are sold openly, the average cost of acquiring an expanded quota for apparel products was estimated in early 1984 to be equivalent to a 47 percent tariff, whereas a comparable figure in 1982 was 10 percent. The gap between U.S. and world prices is even larger than this, because foreign exporters also face an average U.S. statutory tariff on apparel of 21 percent. Nevertheless, in 1985 legislation to tighten further import restrictions on textiles and apparel became a focal point for protectionist action in the Congress. The bill sent to the President would have rolled back imports by roughly 5 percent and stringently controlled future import growth.

The President vetoed this bill because of the high additional costs it would have imposed on consumers, and because of the offsetting negative effect on U.S. exports, a particular concern if retaliatory foreign trade barriers are imposed. The rollback probably would have resulted in consumers paying an extra $4 billion to $8 billion in 1986 for apparel and textile products. By breaking bilaterally negotiated agreements reached under the MFA, the rollback would have subjected the United States to demands for compensation or retaliation. For example, when the United States tightened its rules for determining the country of origin of imports in 1984, the Chinese stated that they were reducing purchases of U.S. agricultural exports in retaliation.

A tightening of trade restrictions would have raised international political pressures on the United States. In a situation where market shares are allocated on political grounds rather than on the basis of economic efficiency, countries with high-cost producers tend to lobby for control over sales that they otherwise could not make in an open market. Countries with low-cost producers tend to complain that their competitive strength is being arbitrarily eliminated by administrative fiat. Countries that already have a large established share of the market benefit from a system that allows them high returns from selling at prices in the United States that are above world market levels. Yet, in a competitive market they might be displaced by the expansion of more efficient countries and emerging new competitors. Any U.S. action leaves current or prospective quota holders displeased without benefiting U.S. consumers.

SEMICONDUCTORS

Several trade actions affecting the semiconductor industry were initiated in 1985. U.S. producers filed two antidumping cases against Japanese firms, and the Federal Government initiated another case. These cases address unfair pricing practices in the U.S. import market. Broader policy concerns regarding U.S. access to the Japanese market have been considered in one of the four bilateral U.S.-Japan market-oriented sector-selective talks initiated in early 1985 and in an unfair trade case brought by the domestic industry under Section 301 of the Trade Act of 1974. Market access in Japan is important because the competitive position of U.S. semiconductor producers depends upon their total volume of sales, over which large research and development expenditures are spread and which allow greater efficiencies in production. These various trade actions raise important issues relevant to carrying out government policy in this and other high-technology industries.

An antidumping case can be based on two alternative conditions: either foreigners are selling at a lower price in the U.S. market than in their own domestic market, or foreigners are selling at a price less than cost, specifically less than average total cost. Japanese practices do not seem to fall in the first category, as semiconductor prices reported in Japan are lower than in the United States. Rather, Japanese practices appear to reflect very rapid price cutting to promote greater sales volume, even if it may mean selling at a loss. Such a strategy potentially could be economically advantageous to Japanese firms if they could drive U.S. competitors from the market permanently and then raise prices collusively. It would also be advantageous to vertically integrated firms if success in semiconductor production allowed more timely development and introduction of other products.

The antidumping cases will address several challenging conceptual issues. Large research and development expenditures account for a significant share of product value and must be allocated over expected production. This cost calculation requires an estimate of the length of the relevant product cycle and prospective volume of production. The role of likely reductions in variable costs, as firms gain more production experience, must also be recognized.

If the Department of Commerce finds that positive dumping margins exist, and if the ITC rules that the domestic industry has been injured, antidumping duties will be levied. Higher Japanese prices in the U.S. market would tend to reduce their exports to the United States. Depending on demand and cost conditions, the profitability of Japanese producers could decline, too.

The ability to prevent pricing below cost in the U.S. market may not eliminate the competitive effects of alleged Japanese dumping. If

Japanese producers maintain lower prices in markets outside of the United States, a price differential between U.S. and world markets may cause U.S. users of semiconductors to locate operations offshore to take advantage of cheaper inputs. U.S. users of semiconductors are concentrated in the following sectors: data processing and office equipment (62 percent); consumer electronics (23 percent); communications equipment (8 percent); and testing and analytical instruments (5 percent). These users appear more likely to be hurt by higher input costs and more likely to shift production offshore than would minor users such as automobile producers. The effect of U.S. antidumping actions on the profitability of Japanese firms will depend not only on the availability of substitute products within the U.S. market but also on the likelihood that U.S. users maintain production in the United States. When alternative supplies are available domestically and U.S. users find offshore production economically unattractive, Japanese semiconductor profitability is more likely to fall and the capacity of Japanese firms to contract.

Other policy initiatives center on greater U.S. access to the Japanese market. The Section 301 case brought by the U.S. industry alleges that access has been denied as the result of horizontal collusion and buying practices among Japanese companies that have participated in government-coordinated research programs. The United States traditionally has sought greater access to sell in foreign markets, but not a mandated share of the market. Measuring progress toward more open markets, however, must be tied to some change in the current level of sales. If a satisfactory negotiated settlement of the Section 301 case is not reached, some observers have advocated prompt U.S. retaliation. Such actions are likely to result in higher semiconductor prices in the United States, thereby reducing the competitiveness of U.S. user industries. Therefore, if retaliation were considered appropriate, an important aspect of designing a response would be to determine in which products Japanese producers were most dependent upon sales to the U.S. market, but any resulting price disadvantage facing U.S. users would be small.

AGRICULTURAL EXPORTS

A particularly relevant agricultural trade policy issue is the establishment in 1985 of the export-enhancement program to promote U.S. commodity sales abroad. The possible consequences of this policy are also relevant in evaluating other efforts to subsidize U.S. exports on a permanent basis. Most significantly, subsidies generally can be expected to result in a loss in U.S. income, because foreign consumers benefit from the willingness of taxpayers to underwrite foreign sales on more favorable terms.

The responsiveness of foreign output to rising world market prices of agricultural commodities in the 1970s and the appreciation of the U.S. dollar in the 1980s mean that U.S. agricultural exports now face considerably more competition. EC export subsidies have helped European producers claim a larger share of world wheat markets. Domestic political support for higher U.S. target prices and loan rates has resulted in increased government acquisitions of commodities. Some of these commodity stocks have been released through the export-enhancement program established in 1985. This approach was extended further by the recently signed Food Security Act of 1985, which requires that, through September 1988, the Secretary of Agriculture use $2 billion of agricultural commodities and products to provide export assistance.

Under the export-enhancement program, the government has made stocks available to U.S. exporters to increase the competitiveness of U.S. commodities. If such a policy could impose sales losses on exporting countries that subsidize their sales to gain a larger share of world markets, then it might force these countries to reduce their export subsidies. A targeted subsidy program, however, is particularly difficult to contain when the product being subsidized is homogeneous and sold in world rather than national markets. Sales in one market may be gained at the expense of a particular country; however, that foreign output may be diverted to other markets, once again displacing U.S. sales. If the export-enhancement program results in a larger total supply of wheat, for example, being offered on world markets, the price would fall for all exporters, not just the offending subsidizer. Net importing countries, such as the U.S.S.R., clearly would benefit from falling world prices. From the U.S. standpoint, greater sales under the enhancement program are likely to displace commercial agricultural sales to some extent.

Achieving some change in foreign subsidization practices is critical to the success of the program. Even committing all U.S. assistance to trade in a single commodity, wheat, would augment world trade by only 5 percent. The resulting pressure on the EC might be insufficient to cause a reduction in their subsidies. In that case, the United States benefits only if there are few alternative uses for the resources being given to foreigners on preferential terms. Given the uncertain success of this approach, the President has indicated his desire to work with the Congress to amend this legislation and to continue Administration efforts multilaterally to obtain a negotiated solution to limit agricultural subsidies.

POLICY INITIATIVES FOR THE 1980s—FREE AND FAIR TRADE

The President's Trade Policy Action Plan is based on the concept of free and fair trade. The guiding principle behind this policy is that opening foreign markets to enable greater U.S. sales is preferable to closing U.S. markets to foreigners.

BROADENING THE SCOPE OF FREE TRADE

An important goal of the President's Trade Policy Action Plan is to begin a new round of Multilateral Trade Negotiations under the auspices of GATT. The United States requested a meeting of the contracting parties of GATT, which took place in September, to begin the preparatory process. In November the parties established a preparatory committee to develop a timetable and an agenda for a new round of trade negotiations. The preparatory committee's work is expected to be discussed at a September 1986 GATT Ministerial Meeting.

U.S. objectives in the new round center on extending GATT discipline to areas where international rules are limited or nonexistent. Additionally, the United States seeks changes in the current operation of the GATT system in dispute settlement and conditions governing safeguard actions. Areas of particular interest are agriculture, services, intellectual property rights, and direct foreign investment.

Agricultural trade is of special interest to the United States because of this country's traditionally strong export position in a sector that largely falls outside of GATT control. In particular, agriculture is not included in the subsidies code on the same basis as manufactured goods. Rather, export subsidies are a cause for complaint only if they allow the subsidizing country to gain more than an equitable share of the world market or if subsidized products are priced significantly below those of other suppliers. Such vague standards often preclude any action under GATT.

Trade in services is growing rapidly. Many activities fall in this category—tourism, transportation, insurance, banking, advertising, engineering design, data processing, and the transmission of information. The United States has a comparative advantage in providing many services due to the availability of a skilled work force and a high rate of innovation to serve the large domestic market. A U.S. goal is to establish the right of entry in foreign markets and also to establish the principle of national treatment or nondiscrimination against foreign providers of services. Trade in many services is subject to government regulatory control. Agreement is needed regarding the transparency and reasonableness of regulations, as well as the appropriate role for government monopolies. Under conditions of limited market access and inconsistent national standards and regulations, the world economy loses from small-scale, inefficient operations designed to serve single-country markets.

The protection of intellectual property is of growing importance to the United States. U.S. research creativity has resulted in the successful introduction of many new products and processes. When foreign producers can copy these innovations with impunity, the rewards to innovation decline and the pace of technical change slackens. A priority for the U.S. Government is to establish wider international agreements protecting intellectual property. Some U.S. concerns deal with the lack of patent, copyright, trademark, and trade secret protection or compulsory licensing provisions. Others center on the right to charge royalties payable in convertible currencies. Basic ground rules tend to be lacking in these areas, especially in countries that feel little need to protect domestic innovation.

U.S. goals regarding direct foreign investment center on reducing the distortions to world trade and production arising from conditions frequently placed on such investment by foreign countries. Foreign requirements that a certain percentage of output use locally produced inputs or that a certain share of output be exported distort patterns of international trade, just as other trade barriers do. Performance requirements can impede the flow of investment to foreign countries, a result also observed when national treatment is not granted foreign firms. As discussed in Chapter 2, developing the private sectors of these countries is an important step to improving their prospects for renewed growth.

If more traditional multilateral steps are unsuccessful, the United States also will explore other ways of opening markets. In 1985 the United States concluded negotiations with Israel to establish a bilateral free trade area. The United States now faces a historic opportunity in the possibility of establishing a free trade agreement with Canada. In September 1985 the Canadian Government proposed that both countries consider bilateral negotiations on the broadest possible package of mutually beneficial reductions in trade barriers. In 1935 Canada and the United States took bilateral steps to reverse the protectionism of that era, steps that became a catalyst for broader international cooperation then. The new Canadian-U.S. initiative offers similar prospects now.

ENSURING THE PRACTICE OF FAIR TRADE

Another important objective of Administration trade policy is to ensure that markets remain open and that competition takes place under internationally agreed trading rules. Countries should be expected to live up to their international commitments regarding market access. The Administration has increasingly emphasized the standard of fair trade, because reduced market access generally reduces the profitability for U.S. exporters, worsens the U.S. terms of trade, and results in a lower U.S. standard of living.

Presidential Involvement in Section 301 Cases

One example of the Administration commitment to fair trade is the self-initiation since September 1985 of four cases against unfair foreign trade practices under Section 301 of the Trade Act. Deadlines for action were set in two other cases. Although the affected industry traditionally petitions to initiate action, a demonstration of official U.S. concern is necessary in particular instances.

The two cases in which the President set a deadline involved EC subsidization of canned fruit and Japanese quotas on leather and leather footwear. GATT panels had already supported the U.S. position. The EC blocked adoption of the panel report and Japan failed to bring its practices into conformity with GATT practice. Presidential involvement indicates the need to move beyond the current dispute-settlement procedures that allow such inaction and delay.

In the case of canned fruit, the EC agreed to a substantial reduction in its domestic subsidy program, a solution that completely avoided the need for compensation or retaliation. In the case of leather and leather footwear restrictions, Japan agreed to compensatory tariff reductions over a broad range of products. The Japanese made concessions in two sensitive areas, paper and aluminum, where the United States particularly had sought broader market access. The Administration will monitor trade in these areas to verify that these concessions will not be impaired by other government actions. Also, the United States retaliated against Japanese leather and leather footwear sales to the United States by imposing an additional 40 percent tariff on them.

Broader retaliatory measures had been considered for implementation if meaningful market access were not obtained. In such cases, U.S. objectives are best met by choosing retaliation targets where many competitive sources of supply exist and where the offending country is especially dependent upon sales to the U.S. market. If such retaliatory actions are likely to become permanent, then the appropriate tariff is one that will not eliminate the offending country from the market entirely. Rather, the tariff will drive down the price received by the foreign country on sales in the United States and raise U.S. Government tariff collections.

The government-initiated Section 301 cases include Brazilian measures to prevent foreign competition in its information industries, Korean restrictions on the operation of foreign insurance companies, Japanese controls over investment in and distribution of tobacco products, and Korea's lack of patent and copyright protection. An additional possible case, directed at Taiwanese restrictions on wine, beer, and tobacco sales, was resolved through negotiation. The United States initiated a GATT case to consider European wheat export subsidies rather than start a Section 301 investigation.

Unfair practices often extend beyond issues directly covered by GATT. However, U.S. actions embody the principle that nations benefiting from the current trading system have an obligation to apply to other areas of international commerce the spirit of open trading relationships established for merchandise trade. Negotiated settlements appear possible in some areas as like-minded nations recognize their own self-interest in moving toward a more open world economy with predictable, transparent rules of conduct.

Export Credit Competition

An Administration goal is to reduce export credit competition, a costly policy that distorts commercial trade patterns. Significant progress has been achieved in recent years. Through an agreement reached in November 1983 among countries of the Organization for Economic Cooperation and Development (OECD), minimum allowable interest rates have been established with respect to official export financing. The rates vary, based on the country destination of an export sale. This progress has reduced the need for a greater permanent commitment of funds to finance U.S. exports through the Export-Import Bank.

Foreign practices still distort export markets through export tied-aid credits, a situation where an exporting country grants foreign aid to make a commercial sale. In the past 2 years, agreements have been reached to ban tied-aid sales in the case of nuclear power plants and large-bodied aircraft. The Administration seeks further progress to cover all sales. Subsidization of these sales largely benefits the purchasing countries and involves negligible expansion of the market. In particular, a significant share of these tied-aid credits is received by middle-income developing countries that can usually finance these purchases on commercial terms. The Administration objective is to obtain international agreement that such tied-aid sales be limited to truly needy countries. The President has proposed an export credit fund to be used strategically against countries that thus far have been unwilling to negotiate limits on the use of such subsidies. The fund is intended to support an aggressive U.S. stance to deny export sales, or significantly raise the cost of making them, for noncooperative nations and thereby encourage these nations to agree to effective limitations on the use of tied-aid credits.

PROMOTING ADJUSTMENT TO CHANGING TRADE PATTERNS

Another important aspect of Administration trade policy involves the adjustment and reemployment of workers in trade-impacted industries. Strong U.S. performance in generating more jobs has been discussed above. A clear goal of Administration adjustment policies is to increase the likelihood that workers displaced in declining industries will share in the general expansion of the economy. This focus contrasts with the consequences of protection, which reduces overall job opportunities and thus worsens the prospects of workers actually displaced by rising imports.

Sound macroeconomic policy to ensure noninflationary growth is the first prerequisite of a successful adjustment policy. Other measures are likely to be unsuccessful if applied under recessionary conditions. Similarly, as discussed in Chapters 1 and 2, policies that promote labor market flexibility give employers a greater incentive to hire new workers.

An Administration goal is to create conditions for sustained growth that will attract workers out of declining industries. Other job opportunities are most attractive when relocation is not necessary, a condition more likely to be fulfilled in States with low unemployment rates. Many trade-impacted industries are located in such States. For example, Maine, Massachusetts, and Missouri are important shoe-producing States, yet each has a below-average unemployment rate and exhibits strong growth in aggregate employment. A similar situation exists in South Carolina and North Carolina, dominant textile-producing States.

The prospects for successful adjustment are greater in strong labor markets. Still, adjustment for many workers may be difficult. Displaced workers who are immobile may face high personal costs of adjustment if local labor markets are depressed. Under those circumstances, a worker's past job skills may be of little value. Prospects for adjustment are sometimes misinterpreted. The initial costs associated with retraining, relocating, or accepting a lower wage job are immediate, while the likelihood of increased earnings in future years may seem uncertain. Research indicates that even in severe cases of dislocation, earnings tend to recover in 3 to 5 years to the level they would have reached in the worker's previous job. These figures do not apply to workers who leave the labor force, nor do they control for changes in fringe benefits. Nevertheless, many dislocated workers make successful labor market adjustments.

Trade Adjustment Assistance (TAA), originally established under the Trade Expansion Act of 1962 and later modified in 1974 and 1981, is intended to promote adjustment of workers in import-impacted industries. The TAA system of readjustment allowances, which expired on December 19, 1985, was based on an extension of unemployment insurance benefits. One rationale for such payments was that they provided partial income maintenance to those workers having the greatest difficulty finding alternative jobs. Yet, these payments also may have retarded adjustment. Benefit payments based on continued unemployment provide an incentive to delay seeking a new job and to wait for recall to the previous job. These expectations may be inappropriate, given changing patterns of production and competitiveness internationally.

The Administration has advocated continued funding of dislocated worker programs under Title III of the Job Training Partnership Act (JTPA) as a replacement for TAA. JTPA does not provide income-support payments to individual workers, but relies on local private industry councils, composed of business, labor, and local government representatives, to determine the most effective adjustment measures for dislocated workers. Also, rather than distinguish which workers are displaced by greater imports and which are displaced for other reasons, a procedure required under TAA, JTPA is intended to encourage adjustment by all dislocated workers. In his 1987 Budget, the President has requested that the Secretary of Labor be provided an additional $74 million of discretionary JTPA funds in 1986 to address particular priority adjustment problems. For 1987, $100 million is requested for that purpose. In recent trade cases involving steel, copper, and nonrubber footwear, the President has also charged the Secretary of Labor to use JTPA resources to promote the retraining, relocation, and reemployment of displaced workers.

Early experience under Title III of JTPA appears promising. Short-term job search assistance can be implemented quickly. Program participants have been committed to making job changes. JTPA does not focus exclusively on training, because that approach is not needed by many experienced workers and is not the most cost effective for them. Experience has demonstrated the difficulty of ensuring that government-provided training results in a long-term increase in worker earnings. A recent review of the record for steelworkers assisted under TAA reports that only a fourth of the workers who chose to retrain found jobs related to their training. This result indicates the difficulty of designing effective training programs and also the potential problems of making income-support payments contingent upon participation in training programs.

An inference that can be drawn from past experience is that no single program or approach can be counted on to succeed uniformly in promoting adjustment in all industries and locations. Experience under a variety of Federal policies has been mixed, often because these programs have other objectives in addition to effective adjustment. From the standpoint of promoting successful economic adjustment, strong economic growth should be the principal goal of Federal policy.

THE THRUST OF U.S. TRADE POLICY

Government management of trade through protectionism will not solve problems that result from international macroeconomic imbalances. It will not recapture jobs lost to rising productivity. At the factory level, its dominant effect will be to shift burdens from one industry to another. Protectionism is likely to penalize U.S. export industries in particular, for they are the most vulnerable to foreign retaliation.

The United States has a strong self-interest in advocating and practicing free and fair trade. This is the course that the President has set for the Nation.

The United States seeks a major transformation of the world trading system, strengthening GATT discipline and extending it to many areas not presently addressed. If multilateral steps are taken to reduce existing trade and investment barriers, all countries will have to agree to politically sensitive changes in some of their current practices. Initial progress toward the opening of a new round of multilateral trade negotiations is encouraging. However, significant advances will occur only if world leaders place a high priority on trade liberalization and pursue economic policies that generate support for it.

Another important dimension of the Administration's trade policy is vigorous enforcement of trade laws and agreements. Unfair foreign practices are especially detrimental to U.S. export prospects. The Administration has aggressively used Section 301 of the Trade Act of 1974 against unfair foreign practices. Although these actions should result in greater U.S. exports of specific commodities and services, they will not, of course, eliminate the current trade deficit. That will depend on appropriate macroeconomic policies being followed. Rather, the purpose of recent U.S. trade actions is to hold all parties to their commitments to free and fair trade principles.

The world today is not static or unchanging. The world daily produces situations that Adam Smith never envisioned. But the accuracy of his policy prescriptions endures. A return to the mercantilist dogma that imports weaken an economy is likely to result in policies that yield slower growth, a lower standard of living, and lost opportunities for current and future generations of workers. The Administration program of free and fair trade provides a strong basis for continued economic expansion in the United States and the world.

CHAPTER 4

Income Transfers to Agriculture

AMERICAN AGRICULTURE IS EXPERIENCING severe financial problems. Agricultural export earnings have plummeted and land values have dropped sharply. Farmers are $210 billion in debt, making U.S. agriculture a bigger debtor than Mexico and Brazil combined. When the debt-service burden of farmers is combined with the erosion in farm asset values, the magnitude of the adjustments that agriculture faces becomes apparent: farms lost $111 billion after capital gains in 1984.

Industries closely tied to agriculture are also experiencing hardship. Demand has dropped for farm equipment and related products. Since 1979, for example, U.S. farm tractor sales have fallen more than 50 percent. Agricultural banks, once a bulwark of domestic finance, are failing at higher rates than similar-sized nonagricultural banks.

In the 1970s, many saw an "ever-expanding" export market curing the traditional "farm problems" of low relative earning power and excess capacity. American agriculture transformed from a sector using export subsidies and concessional sales to a large competitive exporter. This transformation was accompanied by an expansion in productive capacity financed largely by increased borrowing. Because real agricultural land values rose by as much as two-thirds in the 1970s the expanded borrowing seemed financially prudent to many. Land values, however, were predicated upon strong demand for U.S. exports and expectations of continued inflation. By 1983, however, agricultural export value had fallen from its 1981 peak of $43 billion to $36 billion, and is estimated for 1985 at about $29 billion.

No definitive study of the export decline exists. But conventional wisdom runs something like: In the early 1980s both interest rates and the U.S. exchange rate rose. Besides making farm financing more difficult, rising interest rates hurt indebted third world countries that had been among our fastest growing export markets. These countries reduced their food imports. The appreciating U.S. dollar encouraged U.S. customers to switch to alternative suppliers only shortly after U.S. reliability had been damaged by the grain embargo.

Almost simultaneously the United States met stiff and, at times, subsidized competition in export markets. A commonly cited example is the European Community's use of export refunds (subsidies). In 1983 and 1984, these subsidies represented roughly 30 to 35 percent (in European currency units) of the common agricultural policy's authorized budget. Finally, as discussed below, U.S. agricultural programs often encouraged farmers to turn their commodities over to the government rather than to export them.

With agricultural export performance faltering and inflation under control, farm debt incurred in the late 1970s became increasingly difficult to manage and service. What had looked like sound business moves in a rapidly growing sector of a generally inflationary economy of the late 1970s had frequently become unsustainable.

These problems persist despite the existence of Federal Government price- and income-support programs that have cost—and continue to cost—taxpayers billions of dollars a year. Recently, direct Federal payments to farmers have been at record levels and now equal roughly 20 percent of farmers' net cash income. The Federal Government spent more than $60 billion on farm programs in the past 4 years. Yet some of these programs may not help farmers. On the contrary, they can hurt farmers by distorting economic incentives. And some hurt consumers by driving up food prices. Moreover, they use billions of taxpayer dollars in a time of growing fiscal austerity.

A keystone of this Administration's farm policy is that farm programs can distort economic incentives enough to cause some of agriculture's problems. The President recommended in early 1985 that American agriculture be returned gradually to a free-market footing. The Food Security Act of 1985, which the President signed into law in mid-December 1985, implemented some of his suggested reforms. But it maintained the traditional structure of American farm programs. Thus, U.S. agriculture has turned toward the free market, but it still remains heavily dependent upon Federal Government programs. This chapter is devoted to an analysis of the economic implications of those programs that directly and indirectly support farm income.

FOOD SECURITY ACT OF 1985

The Food Security Act of 1985 is the latest omnibus farm bill that provides the basic authority for U.S. farm programs. This act has turned U.S. farm programs toward the free market. Most significantly, it lowered price support levels for several important commodities. Lowering price supports means lower prices for U.S. consumers and makes the United States more competitive internationally. The act also gradually lowers direct income support for some commodities. A less distortionary method of direct income support has been instituted.

By and large, however, the Food Security Act of 1985 retains the traditional structure of most farm programs. Even though improvements have been made, farm programs still distort economic incentives and cause a misallocation of economic resources. Farm program costs under the act are currently expected to exceed $52 billion for fiscal 1986–88. Moreover, in some instances, particularly export subsidies, sugar, and dairy, the act appears to have increased the distortions of American farm programs. In signing the act the President specifically noted that these programs require improvement and he promised to work with the Congress to achieve these goals. The dairy and sugar programs are addressed below; Chapter 3 considers the export subsidy program.

THE STRUCTURE OF AMERICAN AGRICULTURE

Revenue-generating ability in American agriculture is concentrated in relatively few farms (Table 4–1). The three highest sales classes, those with sales exceeding $100,000, generate almost 70 percent of gross farm income but account for only about 14 percent of farms.

Farm income is also highly skewed toward the largest sales classes. Large-scale farms earn most of their income from farming while smaller scale farms earn a significant, and in many instances, a predominant share of their income off-farm. The average American farm family earns roughly 40 percent of its income from farming and the other 60 percent off-farm.

The emerging structure could be characterized as dominated by a relatively few large-scale farmers with most farmers running small-scale, part-time operations. This view is partially misleading. Roughly 30 percent of all farms can be classified as commercial, i.e., annual sales exceed $40,000. And although farms in the $40,000–$100,000 sales category earn more income off-farm than on-farm, net equity per farm averages almost $400,000 in this sales class. Even these relatively small-sized farms have significant equity invested in farming.

Farms with sales exceeding $100,000 receive approximately 66 percent of direct government payments, and commercial farms receive 88 percent of direct government payments. Not all farms receive direct government payments, which are concentrated in the grains and cotton. In fact, the payment concentration is tighter than Table 4–1 suggests; only about 30 percent of farms participate in direct payment programs.

TABLE 4-1.—*The structure of American agriculture, 1984*

Item	Farm size, by annual sales (thousands of dollars)								
	500 and over	250 to 500	100 to 250	40 to 100	20 to 40	10 to 20	5 to 10	Less than 5	All farms
	Thousands								
Number of farms	31	77	229	353	247	269	314	807	2,328
	Percent of total								
Number of farms	1.3	3.3	9.9	15.2	10.6	11.6	13.5	34.7	100.0
Gross farm income	29.1	16.8	23.5	16.1	5.3	3.3	2.4	3.5	100.0
Direct government payments	12.4	16.7	35.4	22.2	6.4	2.8	1.3	.7	100.0
	Billions of dollars								
Gross farm income	48.3	28.0	39.2	26.7	8.8	5.5	4.0	5.8	166.2
Direct government payments	1.0	1.6	3.0	1.9	.5	.2	.1	.1	8.4
Real estate debt[1]	18.9	16.5	25.8	20.1	6.9	4.8	3.6	6.5	102.9
Total liabilities[1]	43.1	33.0	48.1	37.6	12.6	8.4	6.1	10.1	198.9
Net equity[1]	73.8	91.1	156.3	136.6	60.4	43.5	35.9	59.7	657.2
	Thousand dollars per farm								
Direct government payments	33.4	20.6	13.0	5.3	2.2	0.9	0.3	0.1	3.6
Total liabilities[1]	1,379.1	428.6	209.5	106.4	51.0	31.2	19.5	12.5	85.4
Net equity[1]	2,361.6	1,183.6	681.2	386.9	244.3	161.4	114.3	74.0	282.3
	Thousand dollars per operator								
Farm income	423.1	81.9	31.9	6.1	0.4	−1.5	−1.5	−1.8	11.4
Off-farm income	14.4	11.5	10.7	9.7	21.1	17.7	20.2	20.4	17.2
Total income	437.5	93.3	42.6	15.8	21.5	16.3	18.6	18.6	28.6
	Percent								
Direct government payments as percent of gross farm income	2.2	5.7	7.6	7.0	6.2	4.3	2.7	1.1	5.1
	Ratio								
Debt to assets[1]	36.9	26.6	23.5	21.6	17.3	16.2	14.6	14.4	23.2

[1] December 31, 1984; excludes operator households.

Source: Department of Agriculture.

Because many larger scale operations produce commodities (livestock, poultry, nurseries, and fruit and vegetables) not covered by direct payment programs, and because producers cannot usually receive payments exceeding $50,000, the largest farms are not always the largest beneficiaries of these payments. Consequently, farms with sales exceeding $500,000 account for 29 percent of gross farm income while receiving 12 percent of direct government payments. Among commercial farms, no other sales class contributes more relatively to total gross farm income than it receives in government payments. However, large direct payments to wealthy farmers do exist. Average net equity for farms with sales exceeding $500,000 is more than $2 million; on average these farms receive about $33,000 annually in direct government payments.

A succinct indicator of U.S. agriculture's financial problem is the historical trend of its aggregate debt/asset ratio. Almost unprecedentedly, this ratio fell 2 years in a row in the early 1970s, but in 1974 the debt/asset ratio again started to rise. In the 1980s, however, this ratio jumped to levels unseen since the Great Depression. A major reason was a rapid erosion of agricultural land and machinery values. Although total agricultural debt has declined slightly since 1982, land values nationwide fell an average of 19 percent between 1981 and 1985.

Not surprisingly, financial problems are concentrated in the regions with the largest land-value declines, i.e., the Corn Belt, the Lake States, and the Northern Plains. Roughly 60 percent of farms classified as financially distressed by the U.S. Department of Agriculture (USDA) were in these regions; a farm is considered financially distressed if its debt/asset ratio exceeds 40 percent and it cannot generate enough cash income to pay its bills. About 12½ percent of all farms were in this category on January 1, 1985.

Chart 4–1 decomposes financial stress by farm size. Sales classes encompassing $40,000 to $250,000 account for 25 percent of U.S. farms and 40 percent of gross farm income and include more than half of all financially stressed farmers. These sales classes contain the predominantly family-size, commercial farms on which the debt crisis centers. Compared with other sales classes, this category also contains a disproportionate number of commercial grain, dairy, and livestock operators in the Midwest.

PHILOSOPHY AND MECHANICS OF INCOME SUPPORT

The United States has developed an extensive array of programs designed to enhance the economic position of farmers. Since the 1930s, many farm groups have been convinced that the best way to address low farm incomes is to curtail production. Voluntary curtailment programs by producer groups were tried and failed, but the belief in production curtailment remained so strong that some form of it was embedded in virtually every piece of omnibus farm legislation.

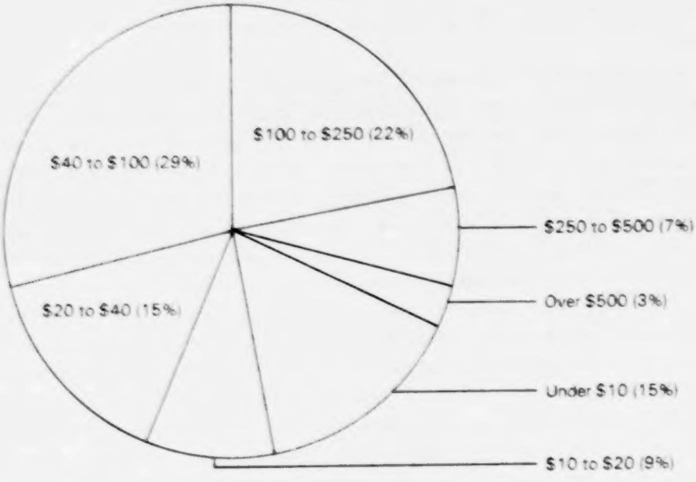
The ability of production curtailment to support income hinges upon the responsiveness of demand to price changes. If consumers, when faced with a given percentage supply curtailment, are willing to increase the price paid for the product by more in percentage terms than the supply curtailment, farmers can raise revenue by selling less. The price increase associated with restricting supply more than offsets the diminished sales volume. Economists refer to this condition as inelastic demand.

Demand for most agricultural products within any given country is usually believed to be inelastic. And as long as U.S. agriculture was

Chart 4-1

Distribution of Financially Distressed Farms by Sales Class, January 1985

(Sales classes in thousands of dollars)



Note.—Financially distressed farms are defined as those with debt/asset ratio over 40 percent and negative cash flow.

Source: Department of Agriculture.

insulated from world markets, this probably described the situation facing domestic producers. But now that American agriculture operates in a worldwide setting, the efficacy of production or supply curtailment is being questioned. Demand for farm commodities in international markets appears more sensitive to changes in price than internally. If total demand is very responsive to price changes, production and marketing control programs will fail in the long run unless some mechanism insulates the domestic from the world market.

Farm programs can contribute to ends besides supporting income. Other goals which farm policy can ideally pursue include: the assurance of a steady and reasonably priced supply of food and fiber to U.S. consumers; farm income stabilization and more efficient production practices by reducing price risk; and the promotion of socially beneficial research and development programs. Besides benefiting farmers, therefore, farm programs may benefit consumers. What follows focuses on the gains to producers and losses to consumers and taxpayers associated with the major income-support programs. Programs analyzed include: price-support programs (loan programs and direct acquisitions), deficiency payments, production diversion programs, production and marketing quotas, and marketing orders.

PRICE-SUPPORT PROGRAMS

The Agricultural Adjustment Act of 1933 created the Commodity Credit Corporation (CCC) and authorized it to borrow from the Federal Treasury to execute its price-support programs. The CCC supports prices using nonrecourse loans and direct purchases.

Loan Programs

Under nonrecourse loan programs, farmers take out loans and pledge their crop as collateral. The size of the loan is the product of the loan rate times the amount put under loan. Loan maturity varies by commodity but typically is no longer than a year. At maturity, or anytime prior, the farmer can repay the loan plus any accrued interest to the CCC. The farmer can also freely default (hence the name nonrecourse) by delivering the commodity to the CCC in lieu of repaying the loan and any accumulated interest.

The CCC may resell commodities if market prices rise to prespecified levels above loan rates. The CCC's general pricing policy is to stabilize prices and protect the CCC's investment while not interfering with commercial marketing channels. An ideal loan program can operate as a buffer stock, but commodity groups often lobby effectively for release practices that do not depress domestic prices. Commodities having loan programs include wheat, corn, barley, oats, rice, cotton, honey, peanuts, sorghum, soybeans, rye, tobacco, and sugar (sugar loans are made to processors).

Loan programs provide short-term subsidized credit to farmers, and they also provide farmers with price insurance. Farmers receive subsidized credit because the interest rate CCC charges is below commercial rates. These credit subsidies offer farmers a low-cost way to market their commodities. If providing low-cost credit lets the farmer realize a higher average price for the crop, then low-cost loans enhance income. An alternative way to view the loan program is as a subsidy to the marketing and storage functions.

Loan rates also act as price insurance. If the market price stays below the loan rate and accumulated interest, forfeiting the crop under loan (in which case interest costs are forgiven) is more profitable than selling in the market and repaying the loan. The loan rate establishes a guaranteed minimum price for participating farmers. In the absence of direct income-support programs, loan rates can support farm income.

Over time, guaranteeing farmers a minimum price, by lessening price risk, may promote production of a higher amount of the commodity than otherwise. This could benefit consumers by assuring them an increased supply of the commodity at reasonable price levels. A great deal depends, however, upon where loan rates are set. Suppose, for example, that demand and supply conditions are such that without the program market-clearing prices would be chronically below loan levels. Producers will not sell at these lower prices, preferring instead to forfeit their crop to the CCC. Because, by law, the CCC cannot resell at prices below or only slightly above the loan rate, the forfeited commodities are effectively sheltered from the market. The CCC crowds consumers out of the market at prices lower than the loan rate. While producer revenues are protected, consumers are not. When compared with the situation that would have existed without loan programs, consumers lose to the extent that they buy a smaller quantity at a higher price. The producer gain, however, generally exceeds the consumer loss because the producer sells more to the government and consumers combined at a higher price. But taxpayer costs exist in addition to these consumer losses. Once a loan is forfeited, the CCC effectively buys the commodity at a price equal to the loan rate plus any accrued interest. Thus the CCC acquires commodity stocks that must generally be given away or disposed of at a much lower price than acquired. Moreover, the taxpayer also bears the storage costs until the commodity is disposed of. Adding these costs to the consumer loss, a clear social loss can emerge, i.e., the producer gain can be smaller than the sum of the consumer loss and taxpayer expense.

In recent years, loan rates were high enough relative to world prices to encourage farmers to forfeit to CCC rather than to sell. Because the United States exports many of these commodities, high loan rates effectively taxed agricultural exports. By slowing the flow of American commodities to international markets, world prices were held up. The loan rate became a minimum price under which competitors could undersell American farmers. The United States experienced a loss of market share in world markets. By holding up world prices, U.S. loan rates also supported foreign producer income at U.S. taxpayer expense and encouraged expanded production abroad.

A major accomplishment of the Food Security Act of 1985 was to lower loan rates for important export commodities. This change was meant to improve U.S. export performance by making sales into international markets more attractive than forfeiture to the CCC. Lowering loan rates should lower world prices and make it more difficult for others to compete in world export markets. The extent to which U.S. loan rates support foreign-producer prices and incomes will be diminished.

The recent history of the U.S. sugar program illustrates the losses caused by establishing loan rates above market-clearing levels. The raw cane sugar loan rate is 18 cents per pound. In 1985, the world price for raw sugar ranged from about 3 cents to 6 cents per pound. When the Agriculture and Food Act of 1981 established the sugar loan program that prevailed through 1985, it was realized that mandated loan levels were high relative to the world price. The Senate report accompanying this act urged the President to use available authorities to prevent adverse budgetary outlays. The danger was clear: A loan rate set above the world price meant that any sugar put under loan would be forfeited to the government if world prices prevailed.

To keep domestic prices above forfeiture levels, a country-by-country quota and a duty and fee system for sugar imports were established. The quota size has been continually reduced and in one instance the quota year was lengthened. Domestic raw sugar prices were at times seven times higher than world prices. Although the program avoided significant CCC budget outlays, this distortion of economic incentives had predictable effects. High domestic sugar prices made switching to alternative sweetener sources more profitable for sugar users. In 1980, before the quota system was implemented, production of high-fructose corn syrup (HFCS) was 2.0 million tons (roughly 15 percent of the total U.S. caloric sweetener market). By 1985, after the quota had been in place 3 years, HFCS production had more than doubled to about 5.0 million tons (about 33 percent of the total U.S. caloric sweetener market). Major soft-drink manufacturers have switched from sugar to HFCS. Furthermore, domestic manufacturers of high-content sugar products, such as chocolate and candy, are finding it difficult to compete with imports produced using low-cost, world sugar.

The vast internal-external price difference also made circumventing the quota lucrative. Entrepreneurs were importing high-sugar content products, such as iced-tea mix, and then sifting their sugar content from them and selling the sugar at the high domestic price. An emergency import quota was placed on several sugar-containing product categories in January 1985. This emergency quota had the unintended effect of excluding commodities (e.g., kosher pizza shells) from the domestic market for which quota circumvention was not an issue. Consequently, the scope of the emergency quota was narrowed in May 1985.

Assessing the exact gains and losses from the U.S. sugar program is difficult. The United States is not alone in protecting its domestic sugar industry, the European Community (EC) also has a sugar policy that engenders excess production. Exactly how much of the current low world price is due to U.S. or to EC policy is not clear.

Moreover, the sugar program has so distorted economic incentives that tracing the associated multimarket effects with any exact precision is difficult.

However, some estimates can be attached to the sugar program. Recent estimates indicate that the sugar program costs domestic consumers about $2.5 billion to $2.9 billion annually. Domestic producers gain about $1.6 billion to $1.8 billion. Domestically, therefore, producers gain about $1 billion less than consumers lose. About a third to half of this $1 billion is transferred to countries holding import quotas. Because these countries export sugar to the United States at higher than world prices, they can gain from the quota. At least in price ranges observed in recent empirical studies, these exporting countries compensate quantity declines by price increases. However, countries not having access to the American market lose because the quota lowers world prices. On balance, therefore, the U.S. sugar program transfers roughly $1.9 billion to $2.2 billion from domestic consumers to domestic and international producers.

Because there are roughly 12,000 to 13,000 sugar cane and sugar beet farmers in the United States, the average annual transfer from consumers is approximately $120,000 to $145,000 in profit per farm. In addition, domestic consumers pay about another $80,000 per sugar farmer to make the transfer because of inefficiencies associated with the quota system.

On September 18, 1985, a sugar import quota of 1.85 million tons was announced for the December 1, 1985, to September 30, 1986, period. Some experts believed a quota of approximately 1.2 million tons was necessary to avoid significant sugar-loan forfeitures. This Administration's decision to set a quota at the higher level was made to avoid the adverse effects of a lower quota on domestic sugar consumers and a number of smaller countries that depend heavily on sugar exports to the United States for foreign exchange earnings. A deeper quota cut would have had significant economic consequences for the President's Caribbean Basin Initiative.

The Food Security Act of 1985 mandates beginning next quota year that the Secretary of Agriculture avoid loan forfeitures in operating the sugar program. The current quota year, ending on September 30, 1986, is either to be extended until December 31, 1986, or the Secretary is to administer the program so that forfeitures would be the same as achieved by extending the quota year. The President has asked the Congress to reconsider its sugar policy.

Extending the quota year means that a quota designed for a 10-month period would cover 13 months; the effective quota cut is about 25 percent. This quota cut could increase domestic U.S. prices by as much as $40 per ton. U.S. consumers could lose more than

$300 million. Because the sugar that would otherwise have been sold in the United States now must be sold or stored elsewhere, world sugar prices will probably decline.

In the past the objective of no loan forfeitures has been pursued by quota cuts. But maintaining high domestic sugar prices encourages expanded domestic sugar production. In recent years, domestic sugar production has grown. Continued growth could require a prohibitive quota on sugar imports. At some point, domestic production controls may be necessary to avoid loan forfeiture.

Like all programs transferring wealth to agricultural producers by maintaining artificially high prices, the sugar program most affects those consumers who spend the largest proportion of their income on foods and staple products. Poorer consumers tend to spend a higher percentage of their income on food products than richer consumers. This means that the relative burden of such programs falls heaviest on the poorest segments of society and is, therefore, a form of regressive taxation—a transfer of wealth from poorer to richer segments of society.

Direct Acquisition Programs

The CCC also supports some commodity prices by purchasing any of the commodity offered at a stated price—the support price. This technique is used indirectly to support milk prices. Fluid-milk perishability makes acquiring and storing large enough quantities of fluid milk to support prices effectively infeasible. Thus, CCC supports milk prices by purchasing butter, cheese, and nonfat dry milk. Because U.S. support prices for these products are generally higher than world prices, the United States also limits total imports of dairy products to less than 2 percent of domestic production. Without import controls, U.S. price-support operations would support world dairy prices.

The economic effects of direct acquisitions resemble those of commodity loans except that no loan subsidy is associated with direct acquisitions. Excess production can occur if the support price is chronically set at higher than market-clearing levels. Resources normally devoted to other uses may be diverted toward production of the supported commodity. This could be reflected in the milk market by herd overexpansion as well as overexpansion of processing capacity.

The potential economic losses associated with direct acquisition are illustrated by milk. In 1980–84, program costs to taxpayers exceeded $9 billion. For the marketing year ending September 30, 1985, they exceeded $2 billion. In 1985 the CCC purchased roughly 64 percent of all American nonfat dry milk production, 24 percent of butter production, and 20 percent of cheese production through price-support operations. Partly because of these large budgetary outlays, the support price has been lowered in recent years from $13.10 to $11.60 per hundredweight. Even with these cuts, the CCC continues to accumulate processed milk products. The USDA estimates that at current support levels the CCC will acquire roughly 16.5 billion out of an estimated 145 billion pounds of milk products in the 1985–86 marketing year. Estimates indicate that eliminating price supports and allowing all production to come onto the open market would make prices fall about $2.70 per hundredweight in the short run and $1.25 in the long run. Consumer losses from price-support operations are, therefore, estimated at approximately $1.7 billion to $3.7 billion per year. All the consumer loss, plus a portion of the taxpayer expenditure (about $1.9 billion), is transferred to milk producers who will gain somewhere in the neighborhood of $1.8 billion to $3.9 billion. The economic inefficiency of the program costs consumers and taxpayers an extra $0.40 to $1 for every $1 transferred to producers.

DEFICIENCY PAYMENTS

The Agriculture and Consumer Protection Act of 1973 tried to separate price support from income support by introducing target prices and deficiency payments. Target prices are set above the loan rate and entitle participating farmers to receive per-unit deficiency payments equaling the difference between the average market price and the target price (not to exceed the difference between the target price and the loan rate) for program commodities. As long as the market price exceeds the loan rate by enough to cover accrued interest payments, farmers will find it profitable to sell the crop in the market and collect the deficiency payment. The government can then support agricultural incomes without acquiring agricultural commodities. However, target prices create an uncertain and potentially very large budget exposure. Receipt of deficiency payments frequently is contingent upon farmers retiring acreage from production.

As defined by the Agriculture and Food Act of 1981, target prices and deficiency payments tied income support to production levels. (As explained later, deficiency payments need not be tied to production levels.) When market prices are above target prices, such policies can have relatively little effect. With acreage retirement provisions in effect, target prices can even exceed market prices without encouraging significant producer participation. This is because the income forgone on acreage retired from production to qualify for deficiency payments may exceed the extra income generated through deficiency payments. Farmers will then prefer to rely only on the market for their income rather than on taxpayer subsidies.

Target prices above market-clearing levels can be distortionary. When income support is tied to production, participating farmers have incentives to overproduce. If acreage retirement provisions are not sufficient to counteract these incentives, excess production occurs and market prices are depressed. Because the United States exports most crops with target prices, this price-depressing effect can be transmitted to international markets. Consequently, the domestic producer price (the target price) may be higher than the price to foreign and domestic consumers (corrected for transportation differentials, marketing margins, and other factors).

A higher-than-market target price can distort markets closely linked to the supported commodity. For example, the 1985 corn target price was $3.03 per bushel, while market prices were running significantly lower. Because corn is grown competitively with soybeans (which have no target price), these higher than market returns for corn could divert resources from soybean toward corn production. Even if competitive crops have deficiency payments, changing relative producer prices can distort market relationships.

Data on direct government payments suggest that government programs do not distribute benefits equally across crops (Table 4-2). Cotton and rice producers, in particular, receive more from government on a per-acre basis than either wheat or corn farmers.

TABLE 4-2.—*Government payments to producers of selected grains and cotton, 1985*

Commodity	Per acre	Per producer
Wheat	$36	$4,000
Corn	45	2,700
Cotton	84	3,800
Rice	138	9,500

Source: Preliminary estimates of Council of Economic Advisers.

Besides distorting markets for competitive crops, deficiency payments can distort input markets by bidding up input prices. This is particularly true of inputs, such as farmland, that are in relatively fixed supply. The amount a farmer pays for an acre of farmland, other things equal, varies directly with the cash returns that the farmland yields. If deficiency payments increase cash returns, they increase farmland value. Deficiency payments also enhance land rental rates because a renter who can use the land to grow crops yielding higher-than-market returns will pay a higher rental rate than otherwise.

Programs that increase land values and rental rates benefit most landowners holding the land at the beginning of the program. Farmers acquiring land after program institution may pay up to the entire capitalized program benefit to acquire the right to receive the payments. Thus, by enhancing land values, deficiency payments also augment landowner wealth relative to nonlandowners. Moreover, the higher the returns deficiency payments generate, the more land values are bid up. With an 8 percent interest rate the capitalized values of the estimated per-acre direct payments for 1985 are: wheat $450, corn $562, cotton $1,050, and rice $1,725. The average value of an acre of farmland in the United States is $679.

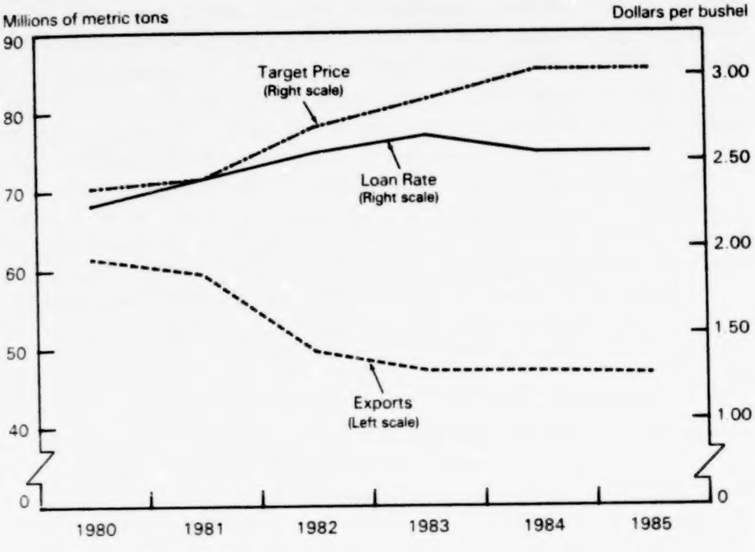
Acreage retirement programs frequently do not reduce production very much. In 1985 producers owning more than 50 percent of all corn acreage participated in the corn program and were required to retire 10 percent of their acreage base (the average of acreage planted and acreage considered planted to corn in 1983 and 1984). And yet the 1985 corn crop was nearly a record. Such events occur for several reasons. First, even significant acreage retirement can be offset by good growing conditions. Second, a farmer usually retires the poorest and least productive land first. Third, by planting fewer acres, the farmer frees resources to be used in more intensive farming of the remaining acres. And fourth, nonparticipating producers can expand their acreage. Hence, a given percentage acreage reduction to accommodate program provisions does not necessarily translate into an equal percentage production reduction. So even with relatively large acreage reduction programs, the price incentives of high target prices can encourage excess production. In some instances, this excess supply can depress market prices enough that forfeiture of commodities under loan to the CCC becomes attractive. When market prices are at such depressed levels, the loan-rate mechanism counters the export-enhancement characteristics of the target price. Now, instead of stimulating exports, the programs inhibit exports because a higher return can always be had by forfeiting commodities to the CCC. The CCC is then in the worst possible position from a budgetary perspective: it is at or near maximum deficiency payments and faces large loan forfeitures. Without significant downward adjustment in target prices or other program adjustments, farmers have no incentive to make the production reductions necessary to ameliorate the situation.

Most commodities with target prices and loan rates have suffered experiences similar to those described above. Payments to farmers have been large and large quantities of CCC stocks have accumulated. And while target prices and loan rates have risen, exports have fallen as illustrated for corn by Chart 4–2.

While these programs are burdensome from a budget perspective—in fiscal 1980 deficiency payments were $80 million, by fiscal

Chart 4-2

Target Price, Loan Rate, and Exports of Corn



Source: Department of Agriculture.

1985 they had risen to about $6 billion—they can also hurt farmers who rely on the free market rather than on taxpayer subsidies. These farmers must sell their commodities at depressed prices. Just as consumers are effectively taxed by direct acquisition schemes, nonparticipating producers can be indirectly taxed by selling at lower than free market prices. At the same time, because commodity programs can bid up input prices, nonparticipating producers also can face an implicit input tax by paying higher than free market input prices. Therefore, not only do nonparticipating producers not reap direct benefits from the programs, but they may end being taxed for relying on the market and not the taxpayer. This creates strong incentives for nonparticipants to participate in government programs. As target prices remain well above market-clearing levels, participation might be expected to rise. In the early 1980s less than 30 percent of corn acreage participated in government programs; in 1986 more than 70 percent of corn acreage is expected to participate.

The Food Security Act of 1985 initially freezes target prices at current levels. However, in an attempt gradually to return U.S. agriculture to a free-market, competitive footing while protecting farm income in the interim, this act lowers target prices slowly after 1988. This change should eventually reduce incentives to overproduce.

Quantitative estimates of the losses occurring in markets with target-price deficiency payment programs vary. Taxpayer costs for the wheat program are estimated at approximately $3.2 billion while producer gains are around $2.1 billion. Taxpayer cost in the corn, cotton, and rice programs are, respectively, estimated at $3.0 billion to $4.1 billion, $1.5 billion, and $0.71 billion. In all these markets producer gains are less than the taxpayer outlay being, respectively, $2.1 billion to $2.5 billion, $1.1 billion, and $0.58 billion annually. Some of the taxpayer costs are transferred to foreign consumers of the supported commodities.

PRODUCTION DIVERSION PROGRAMS

Programs exist which pay farmers not to produce. For example, in 1985 the wheat, cotton, and rice programs required unpaid retirement and the paid diversion of some of the farmer's base acreage. To be eligible for wheat deficiency payments and loans, wheat farmers had to idle 20 percent of their base acreage without payment and 10 percent of their acreage with a $2.70 payment for each bushel that would normally have been produced on the diverted land.

Producers participate in such programs if the income received from the target price and the land diversion payment exceeds what the market would yield without program participation. Society loses from virtually all such programs when the taxpayer cost of the diversion and deficiency payments, added to the wastage of economic resources caused by diversion, exceed any producer or consumer gains.

Between January 1984 and April 1985 the United States had a paid milk diversion program. Producers were paid $10 per hundredweight diverted. Forty-two thousand producers were paid roughly $955 million, the average per-producer payment exceeded $22,000. Program benefits were not evenly distributed throughout all sales classes or throughout all regions. Roughly 75 percent of participants received less than $25,000 in payments, but they received only 38 percent of total payments. The remaining 25 percent, with payments exceeding $25,000, received roughly 62 percent of the payments. Table 4-3 decomposes the payments to the top five recipient States by total State payments and average payment per participating producer in the State. These five States received 38 percent of all milk diversion payments. Average payments in Florida and California were both particularly large, exceeding $100,000 per producer.

TABLE 4-3.—*Milk diversion payments: top five States*

State	Total payments (millions of dollars)	Payments to $25,000+ payees		
		Average payment (dollars)	As percent of total payees	As percent of total dollar amount
Wisconsin	112.5	39,600	14.9	38.3
California	87.9	142,200	86.6	98.5
Minnesota	81.3	37,700	11.1	30.5
Texas	46.6	63,900	70.7	90.8
Florida	40.3	226,700	95.2	99.6
U.S. TOTAL	955.3	57,100	24.9	62.3

Source: Department of Agriculture.

One reason for large per-producer payments in California and Florida, as well as some other States, is that the milk diversion program was not designed to limit income transfers as some other programs are. For example, total deficiency payments per producer cannot exceed $50,000. Milk diversion payments were only limited by the requirement that payments could only be made on 30 percent of the production base. Thus, very large-scale producers were potentially eligible for large diversion payments, and States with many large-scale producers received larger payments than States with smaller scale producers.

The Food Security Act of 1985 establishes a milk production termination program. Each dairy producer is to be taxed 40 cents per hundredweight of milk marketed between April 1, 1986, and January 1, 1987, and 25 cents per hundredweight of milk marketed between January 1, 1987, and October 1, 1987. The milk support price is left at its current level through 1986 and is then cut to $11.35. This tax revenue is to finance partially whole-herd dairy buyouts. The goal of the program is to reduce U.S. milk production by 12 billion pounds. Producers wishing to participate must submit bids to the Secretary of Agriculture. If a contract is executed, these producers must sell for slaughter or export all their dairy cattle and refrain from milk production for a period of 5 years.

The exact effects of the dairy buyout program are difficult to predict. But several things are clear. First, the producer's bid to the Secretary will be large enough to cover the expected difference between what the producer would earn from the herd over time by selling milk and what the producer earns by selling the herd for slaughter or for export. Each producer bid estimates the economic cost of diverting productive resources, e.g., dairy cattle, to a less productive use, i.e., slaughter. The program, if effective, will reduce milk production.

But it will only raise a market's dairy prices if that market's production reduction is large enough to end CCC takeovers in that market. For the coming marketing year, with no production reduction programs, projected takeovers are more than 16 billion pounds. The CCC expenditures on milk support will fall to the extent that the production reduction program curbs takeovers.

The program-induced slaughtering of dairy cows will put downward pressure on meat prices. To minimize this effect, the Food Security Act of 1985 instructs the Secretary of Agriculture to purchase an extra 400 million pounds of meat. Two hundred million pounds are to be used domestically; the remainder goes to export programs and military commissaries. Much of these meat purchases, therefore, could be sold or given to foreign consumers at lower prices than U.S. consumers face.

If takeovers continue and market prices remain around support levels, consumers may not be seriously affected. But the program's goal is production reduction—consumers cannot gain. While CCC expenditures for milk support may go down, any savings here will tend to be offset by the increased expenditures for meat products and by the economic cost of diverting cattle to slaughter or export. Compared with the situation that would prevail under the policy advocated by the Administration, i.e., a lowering of support rates to market-clearing levels, clear social losses emerge.

Because the milk production reduction program does not immediately lower support prices, it does not address a fundamental cause of the current excess capacity. If support rates remain above market-clearing levels in the future, the production termination program will have only relatively short-run effects. With above market-clearing prices new producers will find dairy production attractive and may replace those who exit the industry under the program. An ultimate solution to excessive dairy production, excessive dairy processing capacity, and large CCC takeovers is gradually to lower support rates to at least market-clearing levels and not to further distort dairy production by taxing dairy producers to finance the slaughtering of cows.

PRODUCTION AND MARKETING QUOTAS

Some programs enhance farm income by limiting what farmers can produce or market in domestic markets. When mandatory production controls are effective, consumers lose because they buy less at a higher price. Production controls can increase producer revenues if demand is inelastic. Therefore, production controls effectively tax consumers to transfer income to producers. Effective production quotas also imply that resources whose best use without the program is producing the restricted commodity are devoted to less economically remunerative uses. These costs have to be added to consumer costs to determine whether the domestic costs associated with the program exceed producer benefits.

The economics underlying marketing quotas are similar. Marketing quotas limit the amount that can be sold in certain markets. For example, the U.S. peanut program sets no limits on domestic production and no limit on the amount sold internationally. However, it does limit the amount that can be sold domestically. Limiting the amount sold domestically results in losses to consumers because they purchase less at higher prices. Producers gain because on domestic sales they receive a higher price than otherwise.

Farm marketing quotas exist for tobacco. Tobacco prices are also supported by a loan program. By legislative mandate, these support operations are run at no net cost to the Federal Government. Hence, tobacco farmers are assessed on the basis of tobacco marketed to fund the no-net-cost-tobacco fund.

Marketing quotas for tobacco have decreased as the demand for U.S. tobacco exports has diminished. Loan rates for tobacco are also at levels that may make it difficult for U.S. tobacco to compete in world markets. As a consequence, the U.S. share of the world tobacco market has diminished (Chart 4–3).

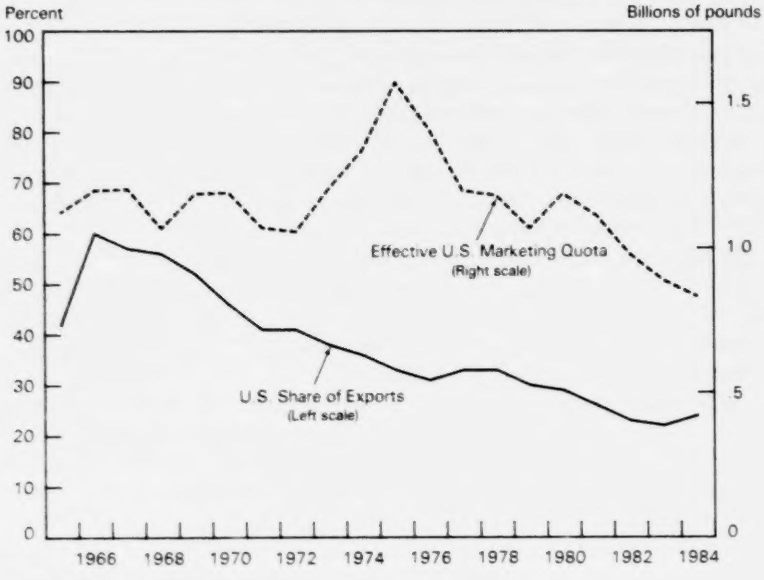
If quota limitations raise producer incomes, producers will pay a positive price for access to the quota. In burley and flue-cured markets, quota rights can be either sold or rented. Thus, establishing effective quotas creates income and, hence, wealth for quota owners. If quotas were abolished, quota owners would suffer a real wealth loss. An estimate suggests that quota abolition would entail losses of roughly $700 million to $800 million to current quota holders. Although these losses are large and real, their value equals only the value of income extracted from consumers and transferred to quota owners through the program.

Tobacco legislation was not included in the Food Security Act of 1985, but a new tobacco price-support program is to be considered by the Congress later this year. The present program was designed to be funded through producer assessments. Because of a drought in 1983, however, the burley tobacco crop was of extremely poor quality and almost one half remains unsold. An important provision of the proposed new legislation requires the government to help burley tobacco farmers cover some of the losses associated with this crop. This provision of the bill could cost more than $0.5 billion.

The U.S. peanut program places a quota on domestic peanut marketings but no limitation on the amount of American peanuts sold in international markets. Peanut prices are also supported by nonrecourse storage loans. Support, however, is two-tiered: Peanuts eligi-

Chart 4-3

U.S. Share of World Exports of Flue-Cured Tobacco



Source: Department of Agriculture.

ble for domestic sale are supported at a higher rate than peanuts not eligible for domestic sale (nonquota or additional peanuts).

A rough estimate of the consumer losses and producer gains associated with the peanut program can be made by comparing the export and domestic prices. For 1982–84, the average price difference was about 9 cents per pound or $180 per ton. Given domestic consumption at roughly 1 million tons, total producer gains were about $180 million per year. Consumer losses were slightly larger at about $184 million.

MARKETING ORDERS

The Congress has established special marketing arrangements, known as marketing orders, that operate separately from the CCC. In 1985, marketing orders covered 47 fruit, vegetable, and specialty crops in the United States and approximately 80 percent of fluid grade milk sales.

Marketing orders play roles that range from controlling quantity to generic advertising. The basic legislative authority for existing marketing orders is the Agricultural Marketing Agreement Act of 1937. The primary focus of marketing orders has been the achievement and maintenance of what have been called orderly marketing conditions.

Once established, orders apply to a specific commodity, to a specific geographic market, and to all commodity handlers in the market. Participation in established marketing orders is involuntary. Thus, marketing orders are sometimes controversial, because by law they can limit the freedom of independent producers to choose how, when, and where to market their crop.

Arguments made for marketing orders often revolve around quality control, stabilization, research and information, offsetting potential monopoly power, and income redistribution. Because many marketing-order commodities are highly perishable and/or seasonal, stabilization is often considered a main producer benefit. Furthermore, some orders cover tree crops requiring large capital investments well in advance of production. Because of these long lags some argue that producers need a stable price upon which to base their decisions to avoid under- or overinvestment.

Some marketing orders assess members to fund research programs that benefit all producers but which no single producer has the incentive to undertake. Problems appear in the dissemination of information about a commodity for which it is not easy to develop brand loyalties. For example, if an orange producer advertises and convinces consumers to buy more oranges, all orange producers likely benefit from the increased orange purchases. But only one producer bears the costs. As a result, no producer has the incentive to advertise at a socially optimal level. The formation of marketing orders that assess producers to pay for generic advertising can mitigate such problems.

Marketing orders use quality control, quantity controls, and market-support activities. The main economic issues are whether these tools serve their stated purpose and the magnitude of the economic costs and benefits associated with their use. Quantity controls are controversial because they can be used to enhance producer income by monopolistic-like pricing.

Volume Controls

The Agricultural Marketing Agreement Act of 1937 provides for three methods of volume control: producer allotments, market allocation, and reserve pools. With producer allotments each producer has a base allotment derived from historic marketings. Every marketing season producers are then told how much of the base they can sell. Producer allotments are similar to marketing quotas in their economic effects. When the controls restrict supply, consumers lose by paying more for less of the commodity than otherwise. Producers may gain if the price increase associated with restricting supply offsets the decrease in quantity marketed.

Research has shown, however, that orders with allotment schemes may not practice pure monopolistic pricing because the allotment decision is typically made by the order's administrative committee on the basis of a majority vote. The administrative committee generally has representatives from diverse industry interests; some orders even have a consumer representative. Under majority voting, one expects the outcome to reflect the allotment that maximizes the well-being of the majority. This outcome is not necessarily the monopolistic solution.

If producer allotments give order members a higher income than the free market, then producers will pay a positive price for an allotment. Although only three producer allotment schemes have been in effect recently (Florida celery, hops, and spearmint oil), in two of those orders (hops and spearmint oil) the right to purchase allotments has had large positive prices. (The hops order terminated on December 31, 1985.) This suggests that these orders may have enhanced producer incomes at consumer expense.

Market allocation schemes take advantage of demand differences across alternative markets for a commodity, for example, the markets for fresh and processed fruit. If commodities sold in one market cannot be easily resold in the other, and if one market's demand is more inelastic than the other's, producers may gain by price discriminating, i.e., charging different prices in the two markets. Consumers lose by such pricing arrangements. If one market's demand is more inelastic than another's, a price discriminator diverts some of what would have normally been sold in this market to the other market. Without retrading between markets, price rises in the first market and falls in the second. Consumers in the first market buy less at a higher price and, therefore, lose. Consumers in the second market gain by buying more at a lower price. The amount gained in the second market is less than the amount lost in the first; consumers in the aggregate lose.

Marketing orders using market allocation establish a "free" percentage that can be marketed without restriction. The remainder is marketed in a noncompetitive outlet. Like the peanut program, market-allocation orders do not control the quantity produced and further, they do not restrict entry of new producers. In the short run, the market allocation can enhance producer income from a given crop. Effectively, producers see a weighted-average price from the two markets that is higher than the market-clearing price for the available supply. Without production control or barriers to entry, producers have incentives to expand production in response to this higher perceived price. As time wears on, entry and overproduction tend to erode the original profits that were enjoyed. An increasing amount of the order crop is diverted to the secondary market, effectively lowering the weighted-average price that producers receive. Orders with market allocation schemes include walnuts, filberts, California dates, and raisins.

Reserve pools temporarily remove some of the crop from the market. If used appropriately, a reserve pool can benefit both consumers and producers by operating as a buffer stock. However, reserve pools can artificially restrict supply to increase producer income. For example, produce could be diverted to the reserve pool without bringing it back onto the market for later resale or for resale in a secondary market. If producer revenues are thus enhanced, these practices are tantamount to the price discrimination practiced under market allocation orders. The economic effects would be the same. Orders with reserve pools include tart cherries, California walnuts, spearmint oil, prunes, and California raisins.

Market Flow Regulations

Two main types of market flow regulations exist: shipping holidays and handler prorates. Shipping holidays restrict the flow of the commodity to the market for certain days of the year—frequently right after a peak demand period. Handler prorates, which specify amounts of the commodity that can be marketed during certain time periods, tend to be more controversial. For some marketing orders, prorates apply for only part of the year. But in three western citrus crop orders (navel oranges, valencia oranges, and lemons) season-long prorates are permitted. These season-long prorates could be used to price discriminate by segmenting the fresh-fruit market from the processed market. Fruit marketed in excess of the prorate must be marketed in a secondary market, which usually means the processed market or wastage markets such as livestock feed. Season-long prorates used to limit total deliveries to primary markets should generate basically the same economic effects as direct market allocation—consumer losses, overproduction, and larger sales in secondary markets. For the three western citrus orders with season-long prorates, chronic overproduction has occurred. And in the navel orange order, revenue from sales to the processing market by growers has at times not been enough to cover grower costs. This evidence suggests that these orders may have used the prorate to price discriminate.

In 1985 the Secretary of Agriculture responded to shortages caused by severe freeze damage to the Texas and Florida citrus crops by suspending the prorate provisions for California-Arizona navel oranges. The prorate suspension occurred after approximately 52 percent of the navel crop had been shipped. An analysis concluded that the suspension had no significant effects on either the average price level or price variability. The suspension also had minimal effects on producer incomes. Income under the suspension was higher than it would have been under the utilization schedule proposed by the Navel Orange Administration Committee. Order suspension apparently did not result in less orderly marketing. These results should be interpreted with caution, however, because they are based on an unusual supply situation. A recent study has found that consumer losses from the California-Arizona Navel Orange marketing order for the 1985–86 marketing year will be about $47 million while producers will gain about $26 million. In the longer run consumers would gain about $59 million from ending the prorate while producers would lose about $43 million annually.

Even if prorates are not used to price discriminate through market allocation, both they and shipping holidays can be used to price discriminate over time. Just as one can price discriminate across markets, one can market the same commodity at different times at different prices. To discriminate effectively requires that the commodity once sold should be highly perishable and that the character of demand change over time. For example, some citrus products can be stored on the tree for several months without undue product deterioration but deteriorate fairly quickly once harvested. Also the demand for some order crops bears a distinctly seasonal character (higher, for example, around Christmas time). Intertemporal price discrimination involves charging a higher price during periods when demand is more inelastic and a lower price in periods when demand is more elastic.

Quality Control

Marketing orders can control quality through the setting and enforcing of minimum grade, size, and maturity standards. An argument made for quality control is that removing below-standard produce improves the average quality of produce marketed. But removing fruit or vegetables from the market lowers the quantity marketed; quality controls can be effective quantity controls.

In assessing the effects of quality controls, a primary question is whether consumers can distinguish quality at purchase time. If consumers can distinguish product quality, quality controls can engender consumer losses by limiting the range of alternative purchases. For example, some consumers may prefer to consume fruit that others would find overripe. If ripeness can be determined by examination, eliminating this overripe fruit deprives these consumers of their preferred fruit quality.

Some also argue that quality controls, by improving perceived average quality, enhance demand and therefore result in higher producer prices. This argument relies on the commodity not being priced according to quality. For example, a bad orange might fetch the same price as a good orange. If, however, commodities are priced according to quality differences, the argument may be invalid. Presumably, providing higher quality produce incurs higher costs than providing low-quality produce. Producers will then weigh the cost and price differences and choose the quality of produce that maximizes profit. Product quality would then be determined by the free interaction of consumers and producers and not by the marketing order.

To the extent, however, that quality is not easily perceptible at purchase time, some form of mandatory grading and grade labeling might be desirable to inform buyers about quality. Unless health risks are involved, however, this does not justify the use of minimum quality standards to eliminate lower grades of produce that some consumers might otherwise choose to buy.

An alternative approach is the use of a grading and inspection system similar to that existing in the U.S. beef market. Consumers could be informed about product quality based on publicly available, objective standards applied industry-wide. Then the consumer and not the marketing order would choose what quality of produce to buy.

FEDERAL MILK MARKETING ORDERS

The basic laws underlying Federal milk marketing orders are the Agricultural Marketing Agreement Act of 1937 and the Agricultural Adjustment Acts of 1933 and 1935. Federal milk orders cover only Grade A milk, i.e., milk potentially marketable in fluid form.

The main tools of Federal milk orders are classified pricing and revenue pooling to arrive at a blend price. Although Federal milk orders have no explicit quantity controls, the setting of minimum prices, under classified pricing, may constrain the amount that consumers purchase and thus have the same welfare implications as quantity controls.

Classified pricing separates milk consumption into at least two classes: milk for fluid use (Class I) and milk not for fluid use (for example, ice cream). Minimum prices are then set for each class with Class I milk the higher priced. Minimum prices for lower class milk are related by transportation differentials to the price of manufacturing-grade milk in Minnesota and Wisconsin. Each order then has its own fixed differentials between minimum prices for these classes and Class I.

With uniform blend pricing, market-wide revenues from Grade A sales are distributed to producers by paying each producer a weighted-average price of milk sold in all classes (the blend price) for each unit of Grade A marketed.

Studies have found that the minimum Class I prices are above the prices that would clear the market in the absence of classified pricing. Consumers, therefore, buy less Class I products than otherwise, and fluid grade milk is diverted to manufacturing uses. This diversion depresses prices in the manufacturing market. However, studies indicate that the demand for processed milk products is more elastic than the demand for Class I milk, implying that the resulting blend price is higher than the market-clearing price in the absence of the order. Producers seeing this higher price overexpand production. This extra production further depresses manufacturing grade prices and lowers the blend price. As with market allocation schemes, Federal milk marketing orders can result in oversupply for lower class usages. Estimates of the price-depressing effect on manufacturing grade milk range as high as 9 percent, while the price-enhancing effect for Class I milk has been placed as high as 8 percent. Blend pricing has been estimated to raise average producer prices by as much as 9 percent.

Isolating the total effects of the Federal milk orders is difficult because they co-exist with the price-support program. But by not allowing certain classes of milk to sell for less than the minimum price, orders can constrain consumer purchases. In such instances, consumers lose from classified pricing. Producers of manufacturing grade milk can be hurt if classified and blend pricing depress manufacturing-grade prices. Finally, by placing downward pressure on lower grade milk prices, classified milk pricing can increase the cost of CCC price-support operations.

Because classified pricing can raise producer prices, processors in order areas might want to buy milk at lower prices from non-order producers. To prevent such practices from disrupting classified pricing, a system for out-of-order purchases guarantees that all milk sold in an order area effectively receives the same price. Compensatory charges may be levied if a handler purchases milk from a non-federally regulated handler or uses milk concentrates to produce reconstituted milk. In the case of reconstituted milk, the compensatory charge is the difference between the lowest class price and the Class I price. Reconstituted milk, which is actually competitive with Class I milk, is, therefore, effectively priced as manufacturing grade milk to the handler. The main incentive for reconstitution is removed. Studies show that the efficiency losses from stifling the transportation of milk concentrates for reconstitution from surplus areas to high-cost areas may be substantial.

ALTERNATIVE METHODS OF INCOME SUPPORT

Income-support programs redistribute income away from consumers and taxpayers toward farmers. As such, consumers and taxpayers generally lose from such programs while participating farmers generally gain. But income-support programs by inhibiting the efficient operation of agricultural markets can impose extra costs on consumers and taxpayers that exceed the amount of income transferred to farmers. When such losses occur, the programs are doing more than redistributing income, they are wasting valuable economic resources that could be used to make every one better off. Table 4–4 summarizes estimates of the costs to consumers and taxpayers as well as the producer gains of the major commodity programs discussed above. In all instances, economic resources appear to be wasted because producer gains are always less than consumer and taxpayer losses. However, this table may underestimate the total losses from U.S. farm programs because it does not cover all commodities affected by farm programs. A recent USDA study, covering all program commodities, found that extending the Agriculture and Food Act of 1981 through 1990 would raise annual net cash income to farmers an average of $4 billion above what it would be with no programs. Consumer expenditures for food, however, would increase an average of $5 billion while taxpayer cost would average $16 billion. For every dollar of net cash income transferred from consumers and taxpayers to farmers, an extra $4.25 would be incurred because of program provisions that inhibit the efficient operation of farm markets. Much of the $21 billion consumer and taxpayer expenditure would go not to farmers but would be dissipated throughout the agricultural industry in the form of higher input prices (including land) and increased profits to suppliers of materials and services to farmers.

Farm income can be supported with less waste. The most efficient way to transfer, say, $4 billion a year in net cash income to farmers is simply to pay them this amount directly, independent of what they produce and sell in the marketplace. This would minimize the wastage of economic resources. Consumers and taxpayers would still lose the $4 billion but no more. As a practical matter, however, to avoid encouraging people to enter farming only to receive the government payments, such payments can be made only to farmers in farming at the beginning of the program. New farmers would then decide to enter farming on the basis of whether they could be competitive in a freely functioning market. Finally, these government payments to farmers can be gradually phased down.

The targeting of government payments would be the major issue unresolved by this approach. This is important, because some argue

Table 4-4.—*Losses and gains from income-support programs (annual costs)*[1]

[Billions of dollars]

Commodity	Consumer loss	Taxpayer cost[2]	Producer gain	Total loss
Sugar	2.5 to 2.9		1.6 to 1.8	0.9 to 1.1
Milk	1.7 to 3.7	1.9	1.8 to 3.9	1.7 to 1.8
Wheat	.1	3.2	2.1	1.2
Corn	.5 to .6	3.0 to 4.1	2.1 to 2.5	1.5 to 2.1
Cotton	(³)	1.5	1.1	.4
Rice	.09	.71	.58	.22
Peanuts	.184		.180	.004
Oranges[4]	.047 to .059		.026 to .043	.016 to .021
TOTAL	5.12 to 7.63	10.31 to 11.41	9.49 to 12.20	5.94 to 6.85

[1] Estimates are not adjusted for program changes contained in the Food Security Act of 1985.
[2] Includes CCC expenses after cost recovery.
[3] Less than $50 million.
[4] California-Arizona navel oranges.

Source: Compiled by the Council of Economic Advisers from various sources.

that changing income-support methods would endanger those farmers who are currently the most stressed. This argument lacks empirical support. The largest deficiency payments go to those program participants who produce the most. Typically, these farmers are not the most troubled. The USDA characterizes as most stressed those farmers with a debt/asset ratio exceeding 70 percent and a negative cash flow. These farms receive only 11 percent of all direct government payments. The next most severely stressed are those with debt/asset ratios in the 40 to 70 percent range and negative cash flow; these farmers receive only about 13 percent of all direct government payments.

Where do these payments go if not to the most economically stressed farmers? The answer is—to the unstressed farmers who constitute the majority of all U.S. farmers. The deficiency payment method used in the Agriculture and Food Act of 1981 made it likely that larger farmers would benefit more from government programs than smaller farmers.

Thus, one is hard-pressed to argue that deficiency payments have provided a safety net for troubled farmers. In fact, they may benefit unstressed farmers more. If society's goal is to provide a safety net for troubled farmers, then replacing deficiency payments with income supplements for the most stressed would seem cheaper and more economically efficient.

However, if the present distributional aspects of current programs are desired, income can still be transferred in roughly the same amounts to the same producers with less distortion of production incentives.

One method is to make per-acre payments that approximate current benefits. Farmers would be allowed to plant as much of any crop as they wish. In terms of Table 4-2, this might mean, for example, paying wheat producers $36 per acre, corn producers $45 per acre, cotton producers $84 per acre, and rice producers $138 per acre. If these payments were tied to ownership of specific parcels of land and producers could do anything with the land they wished—including not producing—then program benefits would be capitalized into land prices. But production incentives would not be distorted and land would rent at rates equaling the cash returns it would fetch in the marketplace. When dramatic land price declines are the norm in the Midwest and other areas, a program of such payments that is gradually phased out could ease long-run adjustments in land values that are dictated by market realities.

A second approach is to retain deficiency payments pro forma while changing how payments are calculated. Under the Agriculture and Food Act of 1981, the total deficiency payment a farmer received was the difference between the target and season average price times the farmer's eligible program acreage and the program yield. Both the program acreage and the program yield varied from year to year. Clearly, the higher is the eligible program acreage, the larger is the total deficiency payment. With target prices above market prices, farmers have incentives to expand acreage. Excess production results. A change that fractures the link between income support and production would be to freeze permanently both the program acreage and the program yield. Farmers would receive payments on the basis of these frozen program acreages and yields regardless of how much of any crop they produced. With each individual's payment depending only upon historical production, individuals would have the incentive to produce only what could be sold profitably in the market. A major program change contained in the Food Security Act of 1985 was to freeze program yields at the 1981–85 average (excluding high and low years) and to calculate base acreage as the most recent 5-year average of acreage planted or considered to be planted. Furthermore, to be eligible for payments, farmers need plant only 50 percent of a commodity's program acreage to that commodity. Thus, the Food Security Act of 1985 reduces incentives to overproduction and permits participating farmers more flexibility in choosing the mix of crops planted. However, eligible program acreages are not yet completely frozen, and farmers are still not allowed to plant as much of any crop as they want and still receive deficiency payments. Farmers of program commodities will continue to produce in response to government programs.

Farm incomes are also supported indirectly through price-support programs and market intervention programs (such as quotas and import controls). Although quotas and import controls clearly support income, some would argue that price-support programs are not designed primarily as income supports and thus serve a useful purpose distinct from income support.

To the extent that price supports operate as buffer stocks, they may benefit society at large. For this argument to be valid, however, support prices must bear some relation to market reality. For example, setting loan rates far in excess of free-market prices (as in the sugar program) is hard to construe as anything but income enhancement. Establishing loan rates and support prices well above market-clearing levels prevents rather than smooths price adjustments. Milk price supports fall in this category. They have engendered a chronic surplus that the CCC must remove from the market at taxpayer expense. Milk consumers are taxed twice, once in the marketplace by higher prices and second by the government to fund CCC dairy product takeovers. For such markets, economic efficiency suggests lowering price supports at least to free market-clearing levels.

For many commodities, however, price supports probably have had a stabilizing influence. But recent developments in agricultural commodity markets have lessened the need for government intervention. Recently, the long-term ban on trading agricultural option contracts was lifted. Option markets allow producers to take advantage of favorable price movements while avoiding much of the risk associated with harmful price movements. A put option gives a commodity seller the right, but not the obligation, to sell a futures contract at a given value (the strike price) on or before a specified date. The buyer of the put option (the seller of the commodity) pays a premium to the party writing the contract for this right. A producer, therefore, can guarantee a price for the crop at harvest time or, thereafter, by purchasing a put option. In effect, the producer buys price insurance. If, later, a higher price can be realized by selling the commodity than by executing the futures contract, the producer is free to do so. Thus, the farmer avoids downside price risk without being locked into a contract that inhibits his or her ability to take advantage of favorable price movements. Unlike the loan contract, however, the producer and not the taxpayer pays for the price insurance. The CCC makes loans on and options markets exist for corn, wheat, soybeans, cotton, and sugar.

Basically, as the President recommended in 1985, agricultural policy should be shaped to return farming to a freer market. This means separating income supports from production and lowering loan rates or eliminating them. Future agricultural programs should be flexible and should minimize market distortions in achieving their goals.

CHAPTER 5

Reforming Regulation: Strengthening Market Incentives

MARKETS GENERATE AND USE enormous quantities of specialized information that is extremely difficult and costly for government officials to obtain. When government substitutes for markets, either through regulation or government ownership, this information is usually lost and economic performance is sacrificed. Regulation often reduces the ability of firms to innovate and it frequently restrains competition, leading to higher costs and prices. Where the government itself produces a good, incentives for efficient operation can be stifled. Even where regulation is necessary to deal with incomplete markets, as in the environmental area, greater reliance on market incentives can improve performance.

This chapter points to benefits of using market incentives. It also discusses extending market incentives to other sectors of the economy. In particular, this chapter discusses the effects of deregulation, where deregulation might be extended, where necessary government regulation could benefit from market incentives, and the potential for privatizing certain government activity.

TRANSPORTATION: DEREGULATION SUCCESS

A great deal of economic research has shown that transport regulation served the interest of regulated companies and their unionized workers at the expense of the consuming public. Restrictions on the entry of trucking firms and airlines limited competition and kept prices high. Railroad regulation produced prices that were largely unrelated to demand and cost conditions and that were too rigid to allow railroads to compete with other transportation modes.

By the late 1970s a major deregulation effort was underway. Under deregulation, firms have been able to set prices based on market demand, but constrained by competition. As a result, average passenger fares and many shipping rates have declined and the service variety has increased. Firms have responded to the pressure of competition by seeking wage concessions and improved productivity.

During the regulatory period from 1938 to 1978, not a single new interstate trunk airline received permission to provide service. Since Congress passed the Airline Deregulation Act in 1978, 26 new scheduled interstate carriers have entered the industry and 19 have exited. Existing airlines also expanded into new markets. The number of city-pairs served by more than one airline increased by 55 percent from 1979 to 1984.

Increased entry has led to lower average fares. The Civil Aeronautics Board (CAB) price formula, adjusted for input price changes, shows that except for the smallest markets, average actual fares in 1983 were below those that would have been permitted by regulation. While all fares were not set exactly equal to formula prior to deregulation, the fact that in almost all market types average fares are below formula suggests that deregulation has led to lower average fares.

Since deregulation, a host of new types of fares have been introduced, increasing consumer choice. Peak and off-peak fares are increasingly common, with special fares for very slack periods. New airlines have sprung up serving different segments of the market, with some airlines specializing in low-cost and no-frills flights, while others are offering premium service at higher rates.

By limiting fare competition, regulation greatly restricted consumers' choices. The tradeoff between price and quality is manifested in the airlines' load factor, a measure of the percentage of seats that are filled. The fewer the empty seats flown, the lower the unit costs of operation, but the smaller the probability of a passenger getting a seat on the most convenient flight.

Since 1977, when the CAB began to grant greater fare-setting flexibility, average load factors have increased. In the years 1973–77 average load factors ranged between 51.7 and 56 percent. Since 1977, load factors have ranged between 57.5 and 62.8 percent. Airlines now compete on fares as well as on the frequency of flights. However, those willing to pay for higher quality service can purchase it. First-class seats or nondiscount fares are available on shorter notice, but at higher cost.

Under regulation, the CAB set route structures administratively. Under deregulation, a hub and spoke system has emerged as regional airlines and trunks entered new markets. The carriers found that by concentrating departures in hubs they could serve more markets at lower cost. For many passengers, more extensive hubbing means more convenient service since on a given trip they will change airlines less often. The percentage of passengers completing trips without changing airlines increased from 89.1 to 96.7 percent between

1978 and 1983. Moreover, while some passengers no longer have direct flights, the percentage of passengers changing planes actually decreased slightly from 27 percent to 25.3 percent between 1978 and 1984.

With greater competition, airlines have been forced to improve their cost performance. For example, ton-miles per employee for the "systems majors" increased by 19.5 percent between 1978 and 1985. In sum, the deregulated industry is able to provide greater variety in service at lower unit cost than the industry did during 40 years of regulation.

Accompanying the airline deregulation debate was concern about what would happen to service for small communities. While no one knows what would have happened had regulation continued, service in terms of flights to non-hubs and to small hubs has actually increased by 20 and 31.6 percent, respectively, since 1977. However, airlines have switched to smaller planes to serve non-hubs, and available seats departing from non-hubs have declined by 7.2 percent.

TRUCKING

Similar positive results characterize trucking deregulation. With passage of the Motor Carrier Act of 1980, entry of new carriers into the trucking industry expanded dramatically. The Interstate Commerce Commission (ICC) reported that processed applications for operating authorities rose from 5,910 in fiscal 1976 to 27,706 in fiscal 1981 before declining to 13,544 in 1985. The percentage of those cases where authority was granted rose from 70 percent in 1976 to 99.9 percent in 1985. Overall, the number of ICC-authorized carriers increased from approximately 18,000 in 1980 to 33,548 in 1984. Restrictions on many existing operating licenses were also removed as requests for broader territorial authority or broader commodity descriptions were readily granted.

There is not a great deal of information on shipping costs since deregulation, but one recent survey found that average real truckload rates for large shippers declined by 25 percent between 1977 and 1982, while less-than-truckload rates declined by 15 percent over the same period. Several surveys also have found that service, as described by shippers, improved. Even smaller communities report no deterioration in service since deregulation.

SAFETY

Some argue that too much competition forces cost-cutting and leads to skimping on safety. But competition will not normally induce firms to lower safety expenditures. An airline or trucking firm that has high accident rates will lose business and face higher insurance rates. Although firms close to bankruptcy might arguably find they have less to lose by reducing safety expenditures than a solvent firm, the firms are still subject to inspections and regulation by the Federal Aviation Administration and the Federal Highway Administration.

The available data on airline safety show no increase in accident rates since deregulation. A good way to measure safety is to look at accident rates per 100,000 departures. This controls for the increased number of flights over time and abstracts from the effect of changes in load factors. Table 5-1 shows accident rates over the past 14 years for scheduled airlines. Total accidents per 100,000 departures have been low over the entire period, but reached their lowest levels in 1980 and 1984. Fatal accidents also reached their lowest levels in 1980 and 1984. In 1985 much attention has been focused on safety. Worldwide, 1985 was the worst year in terms of total fatalities. Nevertheless, looking at U.S. accident rates, 1985 was not an unusual year. As Table 5-1 shows, accident rates, both fatal and nonfatal, were exceeded in several years under regulation and deregulation as well. In 1985 commuter airlines, the fastest growing segment of the airline industry, experienced the lowest number and rate of accidents in the history of commuter aviation.

TABLE 5-1.—*Airline accidents per 100,000 departures, 1972-85*

[Airlines using large aircraft in revenue operations]

Year	Total	Fatal Accidents
1972	0.926	0.141
1973	.701	.156
1974	.889	.127
1975	.616	.043
1976	.435	.041
1977	.385	.061
1978	.399	.100
1979	.426	.074
1980	.280	0
1981	.480	.077
1982	.282	.060
1983	.457	.079
1984	.259	.019
1985	.319	.071

Source: National Transportation Safety Board.

The number of trucking accidents, as shown in Table 5-2, generally has increased over the past 8 years with a large increase in 1984. The difficulty for analysis is that reliable data on miles driven are not available, thus making it impossible to calculate reliable accident rates. The pattern of accidents, however, suggests no relationship between the increase in total accidents and deregulation. In 4 of the years for which data are available since deregulation, the total number of accidents was lower than in the pre-deregulation years of 1978 and 1979. Furthermore, the percentage of total accidents accounted for by ICC-authorized carriage has remained close to 79 percent throughout the period. One would expect that if deregulation were causing the increase in accidents, ICC-licensed carriers, a category that has probably increased its market share under deregulation, would show a larger percentage increase in accidents than private carriers. This appears not to be the case.

TABLE 5-2.—*Trucking accidents, 1976–84*

[Number, except as noted]

Year	Total	Type of carrier			
		Mail and other	Private	Authorized[1]	Authorized as percent of total
1976	25,666	109	5,017	20,073	78.2
1977	29,936	44	5,781	23,726	79.3
1978	33,998	53	6,493	26,955	79.3
1979	35,541	59	6,872	28,206	79.4
1980	31,389	41	6,323	24,724	78.8
1981	32,306	35	6,330	25,588	79.2
1982	31,759	104	6,341	24,493	77.1
1983	31,628	147	5,781	24,849	78.6
1984	37,323	225	6,255	29,893	80.1

[1] Carriers authorized by Interstate Commerce Commission.

Source: Department of Transportation, Bureau of Motor Carrier Safety, and Interstate Commerce Commission.

RAILROADS

In the railroad industry, regulation produced price structures largely unrelated to underlying cost and demand conditions. Absent regulation, the market conveys signals as to what rates can be charged on what freight in order to compete with other modes. Furthermore, changing patterns of demand and supply call for adjusting rates. Regulators found the task of efficiently controlling these rates to be impossible. The problems worsened in the 1970s when regulatory lag in adjusting rates during inflation resulted in rates moving up more slowly than the cost of doing business. Because of the varying degree of competition across the different commodities shipped and the changing demand and cost conditions for different types of traffic, adjusting all rates by the same percentage increase was not efficient.

The most dramatic effect of regulation was the bankruptcies of several railroads in the 1970s, including the Penn Central and the Rock Island. In order to improve the performance of the railroads by restoring profitability, Congress granted a greater degree of ratemaking freedom to the railroads in the Staggers Rail Act of 1980. The act freed railroads to set rates as long as the rate is less than 180 percent of variable cost as measured by ICC procedures. For rates above this threshold, if the shipper has no competitive alternative, the ICC can review the "reasonableness" of the rate. Deregulation was a response to a bureaucratic regulatory system that was cumbersome and largely unnecessary because railroads faced competition on much of the freight they shipped.

Overall, the Staggers Act has performed well. While railroads have been able to increase profits, rates have declined modestly in real terms, and productivity has substantially increased. Since passage of the Staggers Act, not a single Class I railroad has gone bankrupt. Moreover, average real freight rates for all commodity groups as measured by the Bureau of Labor Statistics have decreased by 1.6 percent between the third quarter of 1980 and the third quarter of 1985. Even these numbers may overstate rates because they exclude contract rates, which tend to be lower. Productivity as measured by ton-miles per employee hour was up by 44 percent in the first 4 years after passage of the Staggers Act. The ratio of empty car-miles to full car-miles declined from 0.828 in 1980 to 0.756 in 1984, an increase of 10 percent in capacity utilization in the rolling stock. Rate flexibility contributed to these productivity gains. Now a railroad is able to offer a low rate on back-hauls so that rather than shipping empty cars, it can lower rates and capture freight from competing transport modes.

Service quality also has improved as railroads have been able to invest and upgrade the quality of the track and equipment. Route miles over which train speeds were reduced because of the poor quality of the roadbed have gone down from 30,000 miles in 1978 to fewer than 12,000 in 1984. While some of this improvement reflects abandonment of low density track, the improvement is significant.

Railroad Rates for Hauling Coal

Electric utilities and coal companies have asserted that the Staggers Act has allowed railroads to exploit market power in shipping coal. Coal rates, however, as measured by the Bureau of Labor Statistics, have decreased by about 0.7 percent in real terms since passage of the Staggers Act. Many contract rates have also declined. This is not surprising because railroads face competition on much of their coal traffic from other railroads or barges. For plants not yet sited, interregional and interrailroad competition can be intense.

One study estimated that 40 percent of coal shipments are captive to a single railroad. Another study, using a different methodology and definition of captive, estimated that 13 percent were captive. Furthermore, even though some shippers may be constrained now, as old contracts expire or as old plants become obsolete, more choices will be available to utilities. Nevertheless, there undoubtedly are circumstances in which individual shippers find themselves with no alternative to a single railroad.

The Congress intended that there be limits on the ability of railroads to raise rates to captive shippers. The ICC has established two criteria to determine whether rates are reasonable. First, the railroad must be "revenue adequate"—total revenue must generate a return equal to the cost of capital. Second, rates cannot exceed "stand-alone cost," that is, the cost a shipper or group of shippers would incur to build and operate the most efficient transport system. This can be a rail or a slurry pipeline system. These limits have theoretical appeal, but their practical implementation presents problems. To determine revenue adequacy, one must not only estimate the cost of capital, but also measure the capital stock. The Railroad Accounting Principles Board, established by the Congress in the Staggers Act, is confronting these issues.

Many shippers acknowledge the theoretical validity but question the practicality of the stand-alone cost concept, which is intended to estimate long-run marginal cost. Shippers argue that it is costly to prepare and present such a case before the ICC. It is also difficult to determine what other freight would be attracted to the hypothetical system. Small shippers, in particular, might find that the costs of litigating are not justified given relatively small coal movements. Experience with the stand-alone cost guideline is as yet too limited to know whether these potential problems will be significant.

FURTHER TRANSPORTATION DEREGULATION

Great progress has been made in deregulating transport industries. In addition to the sectors discussed above, in 1982 intercity buses were substantially deregulated. Yet, there are still other areas where progress can be made. The Administration in 1985 sent to the Congress a bill to remove the last vestiges of regulation, which would free motor carriers from having to secure operating rights from the government or from filing tariffs. Only safety regulation would remain.

More than 1 million tariffs are filed each year. Rate-filing involves staff and expenditures that serve no useful purpose. Paperwork requirements may also serve as a barrier to the entry of small trucking firms. Even now the ICC sometimes turns down a tariff filing. The Administration bill would make it impossible, without new legislation, for a future ICC to interfere with market-determined rates. The Administration proposal also would eliminate any statutory authority for reviewing applications for operating rights. The ICC now approves more than 99 percent of applications. Total deregulation of trucking would prevent a future ICC from reimposing entry restrictions.

Finally, the bill would eliminate the remaining antitrust immunity enjoyed by rate bureaus. While anticompetitive behavior is unlikely in an industry with such easy entry, removal of antitrust immunity would subject behavior in trucking to the same legal constraints faced by other industries.

An Administration bill deregulating freight forwarders has also been submitted to the Congress. Freight forwarders provide transportation services by consolidating small shipments and arranging with motor carriers for truckload shipping. Entry is easy and competition would be vigorous absent regulation. Rates on domestic water traffic are largely deregulated, and an Administration proposal would remove controls on the remaining water traffic still subject to regulation by the ICC.

To recapitulate, the experience in transportation demonstrates that prices usually decline when government-imposed limitations on competition are removed. It turns out that the market is a much more efficient processor of information than the regulatory system. Deregulation provides a much greater variety of services compared with the uniformity of service under regulation. The various wants of consumers are satisfied better when consumers are free to compare the costs and benefits of various product offerings and firms are free to respond to their demands.

THE EFFECTS OF CONTINUING REGULATION

Sectors of the economy remain where the benefits of market incentives are not being fully exploited. The rest of this chapter examines some areas where increased reliance on market forces would greatly enhance economic performance. It begins with the energy sector, where vestiges of the controls of the past still linger.

THE NATURAL GAS MARKET

Natural gas markets are subject to complex controls producing distortions and inefficiencies that contrast with developments in the oil market since oil price deregulation. It is instructive to review briefly experience in the United States oil market since 1981.

In January 1981, the President accelerated the decontrol process by removing oil price controls 8 months before they had been set to expire. Many observers warned of a rapid increase in prices. Experience has been the opposite. Beginning in 1981 the downward trend in U.S. oil production outside Alaska began to moderate and by 1982 production was increasing. Lower 48 States' production climbed to a level of 7.2 million barrels per day in 1984, a level last reached in 1979.

Under price controls, imports of oil were artificially increased because domestic production was held down and consumer prices were held below the true cost of imported oil. The price paid for crude oil by all refiners was equal to a weighted average of high-cost imports and low-cost controlled oil. A complicated system of entitlements equalized the average cost of crude among refiners. In effect, price-controlled domestic crude was averaged with imported crude, keeping the cost to consumers below world levels.

With decontrol, imported and domestic oil sold at the same price. Consumers no longer paid an artificially low price. Partly as a result, oil consumption declined by 8 percent, from 17.1 million barrels a day in 1980 to 15.7 million in 1984. The reduction in demand plus increased domestic production led to a fall in net U.S. imports from 6.4 million barrels a day in 1980 to 4.1 million in the first 8 months of 1985, a decrease of 36 percent. These developments, together with growth in production outside of the Organization of Petroleum Exporting Countries (OPEC) helped reduce the market power of OPEC and ultimately led to declines in oil prices.

The experience with oil price controls provides important lessons. Natural gas controls produce effects similar to those that occurred in oil markets. Production and consumption of high-cost gas are artificially encouraged at the expense of production and consumption of low-cost gas. Efforts to shield consumers from higher prices have delayed inevitable adjustment and now may be hurting the very consumers they sought to protect.

Natural Gas Price Controls and Their Effects

The Supreme Court decided in 1954 (*Phillips Petroleum Co.* v. *Wisconsin*) that the Natural Gas Act of 1938 required the Federal Power Commission (FPC) to set the wellhead price of natural gas sold into interstate markets. Over time, as demand grew and costs increased, price ceilings set by the FPC proved too low to generate sufficient incentives for firms to explore for new reserves. By the late 1960s and early 1970s shortages of gas developed in midwestern and northeastern markets. After the oil price shock in 1973–74, the situation became worse as gas prices were further out of line with the cost of energy production elsewhere in the economy. Proved reserves of gas declined from 290.7 trillion cubic feet in 1970 to 200.3 trillion cubic feet in 1978.

While gas was becoming scarcer, those who were lucky enough to have contracted for the low-cost controlled gas had little incentive to conserve. As shortages became worse, many States instituted moratoria on new gas hookups and the FPC developed "curtailment" policies to determine who had priority in receiving the limited supplies of gas. Gas that did not cross State lines was not subject to the same controls. In markets such as Texas and Louisiana, gas was bought and sold at higher uncontrolled prices. But gas was available.

The Natural Gas Policy Act of 1978 was an attempt to deal with the shortages in the interstate market. The act extended price controls to the intrastate market. Old gas, gas discovered before 1977, was subject to price ceilings that would escalate with the general rate of price increase in the economy. New gas was subject to higher ceilings and price controls on this new gas were to be eliminated on January 1, 1985. Lastly, gas from deep wells exceeding 15,000 feet was deregulated as of November 1979.

The apparent logic behind this act was that higher prices were needed to encourage exploration and production of new high-cost sources of gas. Supporters apparently felt such incentives were not necessary for more readily available low-cost gas, and that as a matter of equity, those who had discovered gas before 1977 should not benefit at all from decontrol of gas prices.

A pipeline buying both controlled low-price gas and high-price decontrolled gas sells at a single average price to industrial users and to local gas distribution companies. The greater the amount of low-cost gas for which a pipeline had previously contracted, the more it could bid for high-priced gas. The pipeline's customers would see only an average price cushioned by the amount of controlled gas available to the pipeline.

Soon after passage of the act, oil prices rose from $15 per barrel to more than $30. In a decontrolled market, this would have led to higher gas prices as consumers shifted from oil to gas. Under the Natural Gas Policy Act, however, controlled prices could not rise and the price distortions became greater. As a consequence, pipelines bid up the price of decontrolled gas because this was the only market where additional supplies could be coaxed through higher prices. In addition, pipelines reacted to the increased energy prices and fears of shortages in 1979 and 1980 by signing long-term contracts for large quantities of this high-cost gas. Because price controls were binding on new gas, pipelines were forced to compete for the available controlled gas on other contract terms. Pipelines promised to pay for a certain amount of gas whether they took it or not. A study by the Department of Energy details how "take" percentages went from about 60 percent on older contracts into the 80 to 85 percent range on newer contracts. By stemming price competition, regulation channeled buyer competition into other forms just as airline price-fixing by the CAB had caused producers to compete by offering more frequent flights.

Gas consumers paid an average price made up of all the different supplies to the pipeline. This average price was below the actual cost of incremental supplies, so consumers continued to consume too much high-cost gas. The effect was similar to what averaging oil prices did to oil imports during the period of oil price controls.

The other side of the regulatory coin was the inefficient incentives provided for producers. Price controls substantially reduced the incentive to invest in and maintain the production of old gas. The flawed logic of the 1978 act was that, because producers had been willing to find and produce the old gas at past prices that were much lower, they did not need higher prices for this gas. This overlooked the possibility that producers could have stemmed the natural decline of old gas fields by investing to maintain or even to increase production from old gas reservoirs.

From Shortage to Surplus: The 1980s

Due to these rigidities, the system was ill-equipped to deal with energy markets of the 1980s. Declining oil prices starting in 1981 meant that oil in some uses became less expensive than the gas available from many pipelines. Refiner sales prices for No. 2 fuel oil, a substitute for natural gas in many uses, declined from $1.02 per gallon in March 1981, to $0.76 per gallon in March 1985. Those energy consumers who were able to switched back to oil, lowering the demand for gas. The recession of 1981–82 augmented this effect. Gas deliveries for many pipelines declined. Between 1981 and 1983, total sales declined by 14 percent, although deliveries rose slightly in the following year. In a free market, this lower demand then would have been translated into lower prices, but in fact, gas prices to pipelines continued to rise through 1983. Prices paid by residential consumers rose through 1984 and data for 1985 indicate that, through September, residential gas prices continued to rise. Prices to industrial users and electric utilities began to decline only in 1984.

These consumer price increases are in part attributable to the decline in throughput that resulted in higher transportation and distribution charges. Under regulation, pipelines are entitled to recover their cost plus a "just and reasonable" rate of return. As throughput declines, the fixed capital charges are spread over a smaller volume of gas, raising the average transport cost. The charge by major pipelines, as measured by the difference between wellhead price and the price paid in sales for resale, increased by 31 percent between 1980 and 1983 before declining by 8 percent in 1984, for a net increase of 21 percent. The margin charged by distribution companies increased by 84 percent between 1980 and 1984. Another factor contributing to the rising prices was the high level of take-or-pays on newer, relatively high-priced gas. As demand slackened, because a pipeline had to pay for the higher cost gas whether it took that gas or not, cutbacks came disproportionately from the older lower cost gas with lower take-or-pay levels. This, too, raised the average cost of gas in spite of a declining demand and declining spot price.

With the approval of the Federal Energy Regulatory Commission (FERC), pipelines began to offer special marketing programs to their most price-sensitive customers. To gain incremental volume, producers were willing to take a price lower than the current contract prices being paid by the pipeline. Pipelines increased their throughput, lowered average transportation costs, and gained incremental sales credited against their take liability in the take-or-pay contracts.

Special marketing programs were challenged and were found in 1985 by the U.S. Court of Appeals for the D.C. Circuit to be price discrimination contrary to the Natural Gas Act of 1938. A few months after this ruling, FERC promulgated new rules requiring pipelines offering transportation service to any customer to offer the same service to all. In return for this nondiscriminatory pricing, FERC would grant to the pipeline simplified and accelerated certification for any pipeline services. Pipeline response to these regulations has, so far, been less than enthusiastic. Pipelines fear that if all customers can avail themselves of lower cost gas at the wellhead, the pipelines will be unable to sell the gas that they are committed to take on long-term, high-price contracts. Furthermore, the FERC ruling would allow local distribution companies to reduce their contract commitments. As a result, many pipelines are refusing to offer nondiscriminatory transportation services to all consumers.

FERC is considering another regulatory change that would segregate gas sales into two blocks—old gas and all other. Customers would receive a fixed allocation of old gas at the old gas price. The rest would be sold at the average price of new gas supplies. Because the old gas allocation is fixed, the price of incremental consumption would be the higher new gas price. Consumers therefore would base their consumption decisions on a price much closer to market price.

Such a mechanism, by removing the cushioning effect of old gas on average prices, eliminates the bias toward consumption of high-cost gas. Not surprisingly, many gas producers and pipelines with long-term purchase agreements for high-cost gas oppose block-billing. Others correctly point out that block-billing simply transfers the old gas cushion to pipelines' customers—the local distribution companies. State public utility commissions can continue to allow the local distribution companies to average price, blunting the benefits of more efficient pricing by the pipelines. Furthermore, old gas prices still would be controlled and no gains would be obtained from inducing more efficient producer behavior. FERC's proposals, at best, are very partial measures aimed at correcting the distortions in consumer incentives, but with very uncertain prospects for success.

The Administration Deregulation Initiative

In January 1985 new gas prices were decontrolled under the 1978 act. Rather than rising as had been predicted, new gas prices declined from an average of $3.78 per million cubic feet in January to $3.58 in August. In view of this experience, the Administration has decided again to seek complete deregulation of natural gas prices. Only deregulation provides the proper incentives to both consumers and producers. In one attempt to improve natural gas markets, the Department of Energy suggested in recent filings that FERC, using current authority, end the vintaging of gas prices, that is, allowing different prices for gas depending upon when the gas was found. The Department also argues that FERC then can set all prices closer to market-clearing levels.

Recently, the Administration decided to propose legislation that would completely remove all remaining controls on natural gas prices. The Department of Energy estimates that the present value of benefits to the economy are in the neighborhood of $15 billion to $27 billion (1982 constant dollars). These benefits come from the increased supply of relatively low-cost gas and the decrease in the use of high-cost gas. In addition, the Department of Energy estimates that the marginal wellhead price of gas will decline by 2 to 15 percent in the 1985–95 period under deregulation. It calculates that additional supplies of old gas from currently shut-in wells, infill drilling, production enhancement, and delayed abandonment would be enough to lower not only the average but also the marginal price. The Administration approach couples deregulation of wellhead price with mandatory contract carriage. The latter feature means that consumers will have the choice of buying transportation services when pipeline capacity permits or buying gas directly from the pipeline, allowing the market to choose who will bear the risks of demand fluctuations.

Lessons of Natural Gas Regulation

Natural gas regulation demonstrates the difficulties with price controls. Gas competes with oil and oil prices are not controlled. As prices of oil change, so does the demand for gas. What might have been a rational price for gas at oil prices of $15 per barrel was no longer meaningful at oil prices of $30 per barrel and higher. When oil prices declined, the excess supply of gas should have diminished as lower gas prices induced greater consumption.

To be sure, even in an uncontrolled market, the volatility of the energy market would have led to adjustment difficulties. Pipelines that had signed long-term contracts still would have been saddled with these high-priced commitments when prices began to fall. Regulation, however, exacerbated the difficulties. Price controls meant that firms agreed to higher take-or-pay commitments than they would have, had prices been free to adjust. Also, price controls on old gas limited the availability of this gas and caused greater reliance on high-cost substitutes and oil imports. Partial deregulation created problems not anticipated at the time of passage of the Natural Gas Policy Act, problems that FERC has been trying to solve with yet a new set of regulations. In turn, FERC's proposals will transfer these problems to the next level of regulation—the local public utility commissions. Deregulating all natural gas prices, as the Administration has proposed, will avoid these difficulties.

END-USE STANDARDS: A VESTIGE OF OIL PRICE CONTROLS

In 1975 the Congress was concerned that incentives for energy conservation were inadequate. It enacted several laws that dealt with the energy efficiency of major consumer durables. The major legislative effort was the Energy Policy and Conservation Act (EPCA). EPCA established procedures for setting energy efficiency standards on consumer appliances and established corporate average fuel economy (CAFE) standards for new automobiles. These standards required that the sales-weighted average fuel efficiency of the passenger car fleet of each automobile manufacturer reach 18 miles per gallon by 1978 and increase each year until 1985, when the standard was to be 27.5 miles per gallon from then on. The Congress was aware of the great uncertainty surrounding the future energy situation and technological feasibility of the standards. Consequently, the Congress authorized the Secretary of Transportation to amend the standards to the "maximum feasible" level.

At the time of passage of this act, the United States controlled oil and gas prices. Gasoline and other energy prices were artificially low. These low prices affected consumer decisions for a host of consumer durables. A consumer buying a refrigerator, for example, has the choice of paying more for a unit that, due to greater insulation, will use less electricity. The value of lower energy costs over time trades off against the higher initial price and convenience of other energy-using features. Similarly, an auto purchaser is faced with numerous options in performance, size, and gasoline consumption. If energy prices are held below their true cost, consumers will choose larger cars and less efficient refrigerators than they would if faced with the true higher prices.

Because the Congress was unwilling to allow U.S. prices to rise to world market levels, and was also unwilling to accept the consumption and production decisions that resulted from regulated prices, it passed laws that regulated end-use consumption. The practical problems with this approach are many. First, the Congress only selected specific end uses as the objects of controls. Letting prices find their market-clearing level would have induced the proper amount of conservation across all types of energy consumption. Second, the Congress could only guess at the cost-effective level of conservation. Finally, the conservation levels set in 1975 have little relevance in a world that has changed in ways unforeseen 10 years ago. The flexibility of a market cannot be duplicated by rigid legislatively mandated end-use standards.

While one might have argued in 1975 that end-use regulation, clumsy as it is, was necessary, the situation today is dramatically different. Oil prices have been decontrolled. Consumers can make their own tradeoff between gasoline consumption and automobile performance or between low-efficiency and high-efficiency appliances. The United States is also less vulnerable to potential disruptions in the oil market with an oil stockpile equal to more than 100 days of imports. End-use standards are a costly and unnecessary way to provide protection against oil supply disruptions.

CAFE STANDARDS

The most visible remaining end-use standards are the CAFE requirements. CAFE averages for each manufacturer are calculated separately for automobiles produced in the United States and Canada and for automobiles that the manufacturer imports. If the average level of fuel economy realized by a manufacturer falls below the standard, the manufacturer is subject to a fine of $5 per vehicle sold per one-tenth of a mile per gallon of difference between the standard and the actually realized level of gasoline efficiency. For a firm producing several million automobiles per year, the fine for noncompliance could be in the hundreds of millions of dollars. A firm can use accumulated credits earned from exceeding the standards in the previous 3 years to offset fines in a given year. Furthermore, if the firm can demonstrate that it will exceed standards in the next 3 years, it can borrow against those future credits to offset fines.

Table 5-3 presents the passenger car standards and the levels achieved by the big three automobile manufacturers in the United States. Chrysler met or exceeded the standards in all years. General Motors and Ford met the standards in each year until 1983. Ford avoided fines in 1983 and 1984 by using previously accumulated credits. General Motors used previously earned credits in 1983 and in 1984 used previously earned credits and borrowed expected future credits to avoid fines. For 1985 both firms are expected to propose borrowing against future credits.

TABLE 5-3.—*Mileage per gallon for domestic cars, 1978–85*

Year	CAFE standard	Chrysler	Ford	General Motors
1978	18.0	18.4	18.4	19.0
1979	19.0	20.5	19.2	19.1
1980	20.0	22.3	22.9	22.6
1981	22.0	26.8	24.1	23.8
1982	24.0	27.6	25.0	24.6
1983	26.0	26.9	24.3	24.0
1984	27.0	27.8	25.8	24.9
1985	27.5	[1]27.9	[1]26.3	[1]25.5

[1] Projections.

Note.—The 1986 corporate average fuel economy (CAFE) standard is 26 miles per gallon.

Source: Department of Transportation.

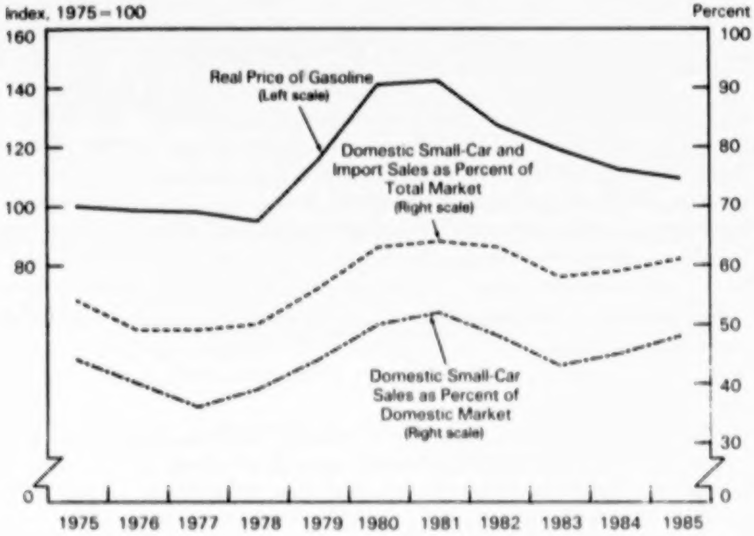
An automobile manufacturer can take several actions to meet the CAFE standards. It can use lighter materials and design more efficient engines. It can lower the weight and size of its cars to increase fuel efficiency. By changing relative prices on its small and large cars, it can affect the mix of cars purchased by consumers. A substantial part of the realized average level of fuel efficiency, however, is beyond the control of the firm. One of the most important of these factors is the price of gasoline. When gasoline prices rise and are expected to stay high, more consumers turn to fuel-efficient cars. Conversely, when gasoline prices fall and are expected to stay down, consumers return to less fuel-efficient cars because the operating cost associated with their greater comfort and other amenities declines.

While many factors affect car purchase decisions, the general correlation between gasoline prices and small-car sales is shown in Chart 5-1. As the real price of gasoline fell between 1975 and 1978, small car (compact, subcompact, and imports) sales, as a percentage of the market, fell from 54 to 49 percent in 1977 and to 50 percent in 1978. The oil price increases in 1979 and 1980 raised this to 65 percent by 1981. As oil prices began to fall in 1982, smaller car sales fell again, reaching 58 percent in 1984. The data on imports include a relatively small amount of larger cars, yet the response in the domestic market alone shows a similar pattern. Between 1981 and 1984 sales of smaller cars, as a percentage of the domestic market, decreased from 50 to 46 percent.

When the standards call for greater fuel economy than would obtain in an unregulated market, their effect is to further encourage the production of smaller, more energy-efficient cars at the expense of larger cars by changing the relative profitability of each type of car. One estimate of the impacts of CAFE standards on large and small cars is presented in Table 5-4. The table indicates the effects of CAFE on the profitability of large and small cars based on a calcu-

Chart 5-1

Real Price of Gasoline and Small-Car Sales



Note.—Real price of gasoline is consumer price index for gasoline deflated by consumer price index for all items.

Car sales are measured in units.

Sources: Department of Labor and Board of Governors of the Federal Reserve System.

lation of the increase or decrease in fines a firm would have to pay if it sold an additional car with the fuel-efficiency level shown, assuming the CAFE standard to be 27.5 miles per gallon and the average efficiency of the firm's fleet to be 25.5 miles per gallon. These changes in profitability are passed on by automobile companies, much as a per car tax or subsidy would be, raising the price of less fuel-efficient cars and lowering the price of more fuel-efficient ones. The major automobile firms have stated that they will not engage in "unlawful conduct," which is the statutory concept of failing to meet the standards after offsetting credits. These firms said, in effect, that in order not to pay fines they are willing to take drastic actions and make large expenditures to reduce the average gasoline consumption of their fleet. For them the net incentives and disincentives are larger than shown in Table 5-4. Given the large declines in oil prices in early 1986, one can expect large-car purchases as a percentage of the total market to increase. This too, will exacerbate the difficulty in meeting the standard and increases the relative disincentive effect on larger cars.

TABLE 5–4.—*Effects of corporate average fuel economy (CAFE) standards on incremental profitability of automobiles of different fuel economy levels*

Miles per gallon	Increase or decrease (–) in profitability per automobile
15	–$980
20	–449
25	–125
30	92
35	248
40	366

Note.—Assumes that a firm currently realizes 25.5 miles per gallon, on average, on its fleet and that the standard is set at 27.5 miles per gallon, and it produces 4.7 million cars per year, and has no offsetting credits.

Source: Council of Economic Advisers.

Costs to Consumers

While there is some question whether CAFE standards had any independent effect when consumers were responding to rising gasoline prices, they now constrain the behavior of the two largest U.S. automobile companies. In filings with the National Highway Traffic Safety Administration (NHTSA) both General Motors and Ford described the difficulties they would have had in meeting the 27.5 miles per gallon standard for the 1986 model year. As a consequence of the economic dislocation a 27.5 miles per gallon standard would have caused and because the Administrator of NHTSA found that the companies made reasonable efforts to meet the standards, the standards for model year 1986 were lowered to 26 miles per gallon. Both Ford and General Motors argue that similar relief is necessary for 1987 and beyond.

As discussed above, the CAFE regulations can affect the price of large and small cars in amounts reaching hundreds of dollars per car. The result is distortions in producer and consumer behavior. A consumer chooses a car such that the sacrifice made in comfort and performance by buying a smaller car is equal, at the margin, to the value of the fuel saved. CAFE standards artificially raise the cost of comfort and performance. Because the true cost of larger cars is less than implied by CAFE standards, consumers are induced to accept less of the attributes they value than is justified by the true cost of production. Similarly, CAFE standards induce automobile manufacturers to excessive expenditures on fuel efficiency that are a net loss to the entire economy.

Fuel Savings

The purpose of CAFE was to save gasoline. Has it done so? As Table 5–3 shows, the energy efficiency of the U.S. automobile stock has increased substantially. Yet factors other than CAFE have contributed to this development. The response of consumers to the dramatic increases in the 1970s in oil prices gave a powerful signal to the manufacturers that the market demanded small cars. Absent CAFE, U.S. automobile firms would have taken many of the actions they did take to increase fuel efficiency.

Given the lag, at least 4 years, in design and introduction of new models, major improvement in fuel efficiency before 1979 probably should not be attributed to CAFE. Yet, between 1973 and 1979 average fuel economy in the U.S. market increased by 43 percent, from 14.2 to 20.3 miles per gallon. Between 1973 and 1975, the year the Energy Policy and Conservation Act was passed, average fuel efficiency of the fleet improved 12 percent. The market response to higher gasoline prices contributed to significant increases in fuel economy. One recent study suggests that, given actual gasoline price increases, the automobile firms responded precisely as they would have without CAFE.

Other considerations make it difficult to estimate CAFE's effect on fuel consumption. The law establishes average standards, yet the concern of the Congress was total gasoline consumption. One effect of CAFE is to raise the cost of larger, less fuel-efficient automobiles. This means that people who want to drive large cars are more likely to hold on longer to their older, less fuel-efficient large automobiles. In addition, because the price of smaller cars declines due to the implicit subsidy, more small cars are sold. If total automobile ownership increases, fuel consumption also may increase despite greater average efficiency of the automobile fleet. In addition, a more efficient fleet will probably be driven more, tending to increase total gasoline consumption.

CAFE Effects on Imports

Fleet averages are calculated separately for a manufacturer's imports and for cars it manufactures in the United States and Canada. Because the bulk of North American small-car production takes place in the United States, the effect of separate calculations is to encourage domestic automobile companies to manufacture small cars in the United States rather than import them. To sell a large car manufactured here, some small-car production must take place in the United States. The tighter the CAFE standard, the more small cars will be produced domestically. Some see this as a way to protect domestic car production and employment.

However, while domestic small-car production is increased by CAFE, domestic large-car production is disadvantaged by these efficiency standards. The limitations CAFE places on large cars are much more restricting on domestic manufacturers than on Japanese producers. The latter have concentrated on small-car production and have built up tremendous CAFE credits. Japanese producers can now enter the large-car or high-performance market without having to worry about CAFE standards, as do Ford and General Motors. Because these firms need not pay fines if they increase large-car or high-performance car sales, foreign manufacturers gain an incremental cost advantage amounting to hundreds of dollars per car from CAFE in this end of the market. If gasoline prices fall even further, and CAFE compliance becomes more difficult for U.S. manufacturers, this advantage for Japanese producers will increase further. In the long run, CAFE will induce greater penetration of imports in the larger size and high-performance end of the market.

Recent developments suggest that automobile companies may have already responded to this incentive. Honda announced in October 1985 that it would be exporting a luxury sedan to this country to compete in the higher priced market. Ford has threatened that CAFE standards will cause it to take some large-car production abroad. The statute defines a car as "nondomestic" if more than 25 percent of its value was manufactured outside of the United States or Canada. Ford claims it will import more than 25 percent of the value for some of its larger models. This action would allow it to average some large-car production with small-car imports and thereby satisfy CAFE. This possibility suggests that any cost advantage of the United States over foreign production of large cars is, in fact, diminished by CAFE. In the long run, this could counter any job gains in the United States that may come from the implicit subsidy of small-car production.

REGULATORY USE OF MARKET INCENTIVES

The Federal Government controls access to many resources such as mineral lands and offshore oil resources. The government must determine who gets the right to use these resources. Offshore oil resources and some mineral lands have long been allocated to the highest bidder. The government accepts a market allocation. Normally this leads to an efficient allocation of the resources. Firms that value the resource most highly and can use it at lowest cost will bid the highest price.

AIRPORT SLOTS

Recently the Administration decided to apply this concept to the allocation of airport landing and takeoff slots at the four capacity-constrained airports—Washington's National, New York's LaGuardia and Kennedy, and Chicago's O'Hare. These airports cannot accommodate additional flights during peak periods. Until now the available slots were allocated by unanimous agreement of scheduling committees made up of airlines either serving or desiring to serve an airport. These committees often could not agree on allocations, though the Federal Aviation Administration (FAA) could try to cajole agreement. When agreements were reached, they represented compromises and not the most efficient allocation of slots.

. The new rules create a market in takeoff and landing slots. Subject to limitations that ensure usage and service to small communities, firms holding slots will be able to sell or lease slots to any airline. Those airlines valuing additional slots the most will pay the highest price. An airline that wants a slot to rationalize its route structure and lower its costs, or an airline that wants to provide service to a market where demand for the service is great, can bid a high price and acquire a slot. An allocation of slots will result that accommodates new entrants and is more efficient than an administratively determined allocation.

ENVIRONMENTAL REGULATION

Trading as a method of efficient allocation has also been applied in pollution control. Under certain circumstances, firms can trade credit for surplus emission reductions among themselves. One firm reduces its emissions not only to meet its own requirements, but also to meet requirements of other firms facing higher costs. The firm that generates surplus emissions reduction credits can sell the credits to others. Firms can also trade reductions at one emission source in a plant for increases at another location within the same plant or at other nearby plants owned by the same firm. The Environmental Protection Agency (EPA) has approved arrangements of this type, and more trading offers a way of substantially improving the efficiency of pollution regulations. The following sections describe the significant benefits and potential problems that come from these emissions trading approaches.

Overview of Air Pollution Laws

The Clean Air Act established National Ambient Air Quality Standards that must be met by each air quality control region. To meet these standards, States must put into place State implementation plans that describe steps that will be taken to attain the ambient standards. In addition, the act and its amendments establish requirements for emissions from all major new plants or significant modifications of existing plants.

The traditional approach to pollution regulation, often called command and control, specifies uniform standards that apply to all plants of a particular category. Thus, for example, all new coal burning electric plants commencing operation after 1972 were required to emit no more than 1.2 pounds of sulfur dioxide per million Btu. Coal-fired powerplants commencing operation after 1979 must meet a tighter "percent reduction" standard that effectively mandates stack-gas scrubbing devices regardless of the sulfur content of the coal. Existing sources must also use specific technology in many cases. Such uniformity of requirements minimizes the discretion firms have in meeting the overall goal of emissions reduction.

The Concept of Emissions Trading

Emissions trading is a market-based method of pollution control. The costs of reducing pollution vary substantially among plants and even within plants. At some plants or individual stacks, it is relatively inexpensive to meet a given emission standard. At others, because of the particular production process or because of the age of the plant, it is much more expensive. The traditional approach has been to require both to meet the same standard. A more efficient method is to ask plants where pollution reduction can be accomplished at low cost to reduce emissions to a greater extent than where pollution reduction is more expensive. In this way, total emissions can be the same as under uniform standards, but the cost is lower.

The difficulty with different standards for different plants or stacks is that regulators do not know which firms fall into which cost category. There are huge numbers of plants in an area, each with a different technology and different cost structure. This information problem usually causes regulators to choose uniform standards. However, an emissions trading approach uses a market to ferret out this information. The total areawide allowable emissions are fixed by regulators. Then trading takes place among firms. A firm with high costs of pollution reduction, instead of actually lowering emissions, pays for emissions reduction credits that it uses to satisfy regulations. The low-cost firms sell the surplus credits they have earned by lowering their own emissions below the level required under the uniform standards, the so-called "baseline."

With trading, regulators need not determine the least-cost level of pollution from each plant. Consequently, they do not need the detailed cost information required for an efficient command and control system. Each firm knows better than regulators how to reduce pollution, whether by new capital equipment, enhanced use of existing equipment, varying production processes, or purchase of an emissions reduction credit. Using market incentives minimizes the costs of meeting any overall target of pollution reduction, whereas a uniform standard would not take advantage of some firms' lower cost of pollution reduction, nor provide incentives for that firm to use its own expertise to improve pollution control.

Use and Assessment of Emissions Trading

Approved emissions trading has actually been conducted in several ways. The specific mechanism depends on whether trading takes place in attainment areas, that is, areas in compliance with the ambient air standards, in nonattainment areas that have EPA-approved plans for attaining the standards, or in nonattainment areas lacking such plans. Furthermore, the allowable mechanism depends upon whether the plant represents a new source of pollution. In all trading situations, however, the basic idea is the same. Several sources of pollution are combined for the purposes of establishing acceptable total aggregate emissions as if a bubble enclosed the various smokestacks or emission sources.

Regardless of the ambient air quality status of an area, emissions reduction trading offers a way to reduce substantially the costs of meeting emissions requirements. One study of the costs of reducing emissions of volatile organic compounds found that costs per ton of emission reduction varied from $60 to $12,000, depending on the emission source. The wide variance in these costs indicates the kinds of savings that can result. By reducing emissions where reduction costs are $60 per ton, for the same total cost, more than two hundred times as much reduction can be obtained than at the source with incremental reduction costs of $12,000 per ton. These potential cost savings as well as potential additional reductions in emissions are an important justification for emissions trading.

Specific examples demonstrate the type of savings achievable with emissions trading. In one recent application, EPA proposed to approve an electric utility plan that would allow the firm to treat two units at a plant site as a bubble. Normally each unit must meet the new source performance standard for sulfur dioxide of 1.2 pounds emitted per million Btu. In the bubble treatment, the two sources together must average no more than the 1.2 pounds standard. Under this bubble the first unit will reduce emissions to approximately 0.6 pounds, the second unit will be controlled so that the average for both sources will be 1.1 pounds, below what would have been achieved had each individual source met the new source performance standards. EPA estimates that emissions will be 3,000 tons less per year than with the traditional approach. The firm estimates that it will save $20 million per year and $500 million over the plant's life. In another example, a manufacturing firm leased several hundred tons of emissions reduction from a firm that had "deposited" these credits in an "emissions bank." In this manner, the firm renting these credits did not have to choose between expensive new capital equipment for an aging production facility or the premature shutdown of the plant.

Some critics of trading reject the notion of surplus emissions no matter where trading takes place. They are reluctant to give up the perceived opportunity to force greater reductions, even in areas that have attained the ambient air quality standards regardless of the cost savings that can be generated. However, the use of bubbles in nonattainment areas that lack approved attainment plans receives the most criticism. It is argued that in those areas the cost savings of trading are irrelevant. Emission reductions are required by law. If an area has not reached or determined the level of reductions required for attainment, then allowing one emitter to sell a so-called surplus simply will reduce pressure on someone else to make needed reductions.

In many cases, it is argued, the so-called surplus results from actions that would have taken place without the added incentives of emissions trading. For example, a firm closes a unit or changes the manufacturing process and thereby gains an emissions reduction surplus that it may sell. It might have closed the plant or changed the technology even if it were not able to sell the emissions reduction. Or the surplus might result from an emission reduction technology exceeding original performance expectations. Granting emissions credits for these reductions, it is argued, means giving up a chance to reduce emissions in the nonattainment area.

In nonattainment areas, the debate is actually about how trading affects the ability to improve air quality. In order to assess these arguments, one must ask whether emissions trading in fact does make attainment more or less difficult. The answer depends on what would occur without the trades. Is compliance less likely if trading is made more difficult? Behind the opposing views on emissions trading lie two different views of the regulatory process.

The argument that there is no surplus is really an argument that through traditional command and control methods regulators will achieve reductions at each emissions source that surpass the reductions achievable with trades. It assumes that regulators, at a reasonable cost, will achieve these surplus reductions anyway and will gain additional reductions from other sources. But this is a highly idealized view of environmental regulation.

In fact, noncompliance is common. Regulators typically lack information about emissions from specific sources. Firms have incentives not to report the amount of reduction that is feasible because they fear, with good reason, that the information will stimulate even more stringent regulatory standards. Regulators must frequently negotiate reductions with firms and often settle for less than the maximum amount implicit in the arguments of critics of emissions trading. The less cost-effective the regulations, the greater the firm's resistance to reductions and the more negotiation and delay in achieving reductions. In essence, the opportunity forgone is not the low level of emissions envisioned in the critique of trades, but something often far short of that.

Market incentives can improve this imperfect system by encouraging compliance and hastening attainment of ambient air standards. Firms that know they can do better than the standards require will find it in their interest to come forward voluntarily because the surplus reduction now has value. It is in their interest to do better and to demonstrate the feasibility of greater reductions if they can sell these credits immediately or bank them for future sale. Lowering the costs of emissions reductions can also make firms less resistant to taking the necessary actions to lower emissions further.

Firms increasingly will regard pollution reduction as an element in the production process. A firm that can realize a monetary reward from efficient emissions reduction will choose technology that takes this into account. Rather than having regulators choose technology, as is often done now under command and control regulation, trading schemes encourage firms to choose technology to surpass minimum requirements or to select production processes that are less polluting and that cannot be mandated.

As a practical matter, it is difficult to second guess firms' actions. If the regulators could determine what the firm would have done, they probably could have required efficient action in the first place. In fact, the information problems that plague command and control systems make a policy of ex post analysis difficult.

Inevitably some firms will benefit under a trading policy from doing what they would have done anyway. In these cases, opportunities for additional emissions reductions will be lost. This is only a problem in nonattainment areas without approved plans, where there is still a requirement to reduce emissions further but no plan on how to do so. But, the obvious cases can be readily dealt with. EPA, for example, could decide not to grant credits for actions taken before application for a bubble. Safety margins could also be built into a bubble by requiring a bubble to lower emissions below current required levels in nonattainment areas. Of course, constraining bubbles too much will prevent the cost and emission reduction benefits from being widely realized.

In summary, as in all economic policy decisions, the question comes down to one of the appropriate opportunity cost. Emissions trading makes sense if the alternative is a highly imperfect and costly command and control regime. If, on the other hand, regulators can set standards and mandate technology that, at relatively low cost, will reduce emissions and achieve ambient standards, a trading mechanism is not necessary. However, major emission reduction cost differences, and the fact that many air quality control regions still have not attained the ambient air quality standards, suggest that command and control regulation is not efficient.

Experience with other regulatory solutions also suggests that market incentives are likely to be considerably more efficient. Benefits similar to those realized in other sectors can be obtained by employing market incentives more in environmental regulation. Many issues are the same. Plant managers who know the costs of production and of emission reduction are given an incentive to act upon that information. The alternative is to have regulators determine, from a much more limited information base, how firms should act. Just as the CAB could not determine what service configuration satisfied consumers at lowest cost, regulators are unable to determine how to produce emissions reductions most efficiently. Realizing this fact, it is the policy of this Administration to encourage the use of market-based incentives.

EXTENDING MARKET INCENTIVES

Another area where market incentives can improve economic efficiency is in the provision of goods and services by the government itself. The major ways to infuse market-based incentives in these activities are contracting out to the private sector through competitive bidding and the outright sale of government assets.

There are three primary sources of efficiency gains. First, managers not responsible to shareholders have greater latitude to pursue managerial objectives other than value maximization. Consequently, government-owned firms might be expected to operate less efficiently than privately owned businesses. Second, the monopoly constraints that often accompany government production are reduced. Third, the price of products produced by the government often reflects hidden subsidies that distort market outcomes.

The range of government-provided services and products is wide and offers many opportunities for what has come to be called privatization. The Federal Government provides many products and services similar to products and services provided in the private sector. A partial list includes mail delivery, electricity generation, land management, and the financing and management of housing developments.

Currently, there is great interest in privatization as a way to reduce government deficits. Indeed, the Administration in its budget for fiscal 1987, has proposed several privatization initiatives. While privatization can be a strategy of budget reduction, the long-run gains of privatization to the economy are increases in economic efficiency.

Over the past few years Great Britain has sold a large number of government-owned corporations. Other countries, including Brazil, Japan, and India, are also divesting themselves of government assets and returning them to the private sector. In the United States there have been several efforts aimed at contracting with private firms to do what have traditionally been governmental functions. The Government Printing Office, for example, contracts out for $548 million of printing services. The Office of Management and Budget (OMB) estimates that $6.0 billion of government-provided services such as data processing, accounts management, and facilities maintenance should be considered as candidates for contracting out to private firms. OMB estimates that more than $1 billion could be saved annually from contracting out these services.

Substantial empirical evidence suggests that private firms are more efficient than government suppliers of similar products or services. A recent study compared the costs of municipal services such as laying asphalt, tree maintenance, and refuse collection in cities contracting out for service with costs in cities performing the functions themselves. The municipalities were all in the same geographical area. After controlling for scale of operation and quality of service, contracting out lowered costs for most services by amounts ranging from 37 to 95 percent. Only payroll preparation showed no significant cost savings through contracting out to private firms. While it is difficult to control for all possible differences in quality of services and to measure costs precisely, these large percentage differences suggest that contracting out has been an important cost-saving measure. Additional evidence comes from a study of water utilities. After controlling for scale and adjusting for differences in input prices, the study found that average production costs were lower for privately owned than for publicly owned firms.

A study of Australia's two interstate airlines, one government-owned and the other private but heavily regulated, found that the private airline was more efficient as measured by tons of freight and mail carried per employee. A study of mutual savings banks in the United States also points to the importance of shareholder control. Depositors technically own mutual banks but in practice they exercise no control over management. Furthermore, regulation limits the ability of management to capture profits in higher salaries. The result: Mutuals appear to be less efficient, incurring larger expenses than for similar operations in stockholder controlled firms.

At the Federal level, cost savings can be realized by transferring production of goods and services to the private sector. The General Accounting Office found that in hydroelectric power generation, after adjusting for scale and degree of automation, government operating costs were 20 percent higher than those for private firms. In addition, public hydroelectric plants were slower to innovate. Similar findings by the President's Private Sector Survey on Cost Control point to other potential reductions in cost where private firms replace government production.

STEPS FOR FURTHER PRIVATIZATION

The United States has begun to take steps to sell assets that would be managed more efficiently in the private sector. This Administration has proposed selling Conrail, the federally owned freight railroad. It also has suggested ending subsidies to Amtrak, leaving it to the private sector to determine whether and to what extent rail passenger service was worth maintaining. Recently, a proposal to sell the power marketing authorities has been put forward.

The power marketing authorities are government agencies that sell the power produced by government-owned hydroelectric dams. Sales of these authorities, such as Bonneville Power, to the private sector would increase efficiency in several ways other than improving managerial incentives. The Federal Government currently subsidizes borrowing rates through the Federal Financing Bank. This subsidization misinforms management about the true cost of maintaining or expanding the system. Also, the President's Private Sector Survey on Cost Control calculated that power marketing authorities' subsidized borrowing rates and current pricing methods significantly underprice the cost of electricity that they sell. If regulations allow, a transfer of the assets to the private sector at prices that reflect the true value of the assets would lead to more efficient pricing.

An additional opportunity is the introduction of more market-based incentives in the U.S. Postal System (USPS). The USPS is, in effect, a transport monopoly maintained by law. The private express statutes reserve "letters" for the USPS. A letter, for the purposes of the private express statutes, is defined by USPS itself. The effects of this monopoly are similar to the effects of other transport regulation: Average rates are higher than they need be and service is poorer.

The costs of the USPS are elevated, much as the costs of trucking were elevated under regulation. Wages of postal workers are higher than wages of comparable employees in the private sector. A recent study found that after adjusting for education and skill level, a postal worker earned in excess of 20 percent more than comparable private sector workers. Lacking competition, these higher wages lead to higher rates as the costs are passed on to consumers. Rates are distorted in another way. Although costs vary with distance and destination, all first-class mail is priced at the same rate based on average cost. This is, in effect, a subsidy for rural and long-distance delivery that is paid for largely by shippers of first-class mail within urban areas.

There have been different proposals for bringing market incentives into the USPS. One is the greater use of private contractors. At present, many private firms pre-sort bulk mailings in order to realize the pre-sort discount offered by the USPS. Operations such as intercity transport of mail are contracted out to private firms. Extending contracting to rural delivery routes as they become vacant and contracting out the sorting of letter mail through competitive bidding have been suggested as ways to bring some of the benefits of competition to the system. Other proposals would chip away at the USPS monopoly by allowing private firms to deliver some selected types of letters.

The most direct approach would simply eliminate the private express statutes. Without a government monopoly, private firms would be free to enter and compete for business. Proponents of this approach point out that there is no convincing evidence of economies of scale in the Postal System that justify a monopoly and, even if there were, competition would ensure that the most efficient firm would survive. Furthermore, the incentives of profit-oriented firms would lead to costs lower than those of the USPS.

A concern with a purely private system is that while prices for most consumers would decline, prices to rural areas would increase or service would be poorer. Similar arguments were made in the debate about airline and trucking deregulation. Undoubtedly, under deregulation the cost of mailing will depend on the cost of providing the service and it will probably cost more to mail a letter a longer distance or to a remote location. However, because postal system costs will tend to go down, it is not clear, on balance, whether rural rates will increase.

In sum, privatization should be seen as a method to improve economic performance in many areas of the economy. The evidence suggests that in many cases private firms can provide services more efficiently than can government enterprises. Contracting out or selling assets to private firms are two methods to carry out such a policy. Of course, not all governmental activities can be privatized, yet those discussed above and others as well offer possibilities for enhancing economic efficiency.

CONCLUSION

Economic performance can be improved through greater reliance on market incentives. In some cases regulation itself causes inefficiency, and deregulation is an appropriate policy. In other areas, as in the environmental area, government regulation is necessary to correct an underlying market failure. Yet, even here greater reliance on market incentives can produce desired social outcomes at lower cost. Finally, where government produces a good or service such as producing electric power or delivering mail, a better incentive structure can be brought to bear through privatization. This Administration is committed to increasing efficiency throughout the economy, using these different approaches, where appropriate.

CHAPTER 6

The Federal Role in Credit Markets

THE INSTABILITY OF INTEREST RATES and inflation through the 1970s and early 1980s resulted in substantial difficulties for many institutions in U.S. credit markets. Home mortgage lenders experienced an enormous capital loss from which they are not yet fully recovered. Lenders to real estate, including agricultural real estate, suffered losses when real property values, once buoyed by inflation, fell with the return of lower inflation. Similarly, institutions that lent dollars abroad when inflation was high and the dollar was low face borrowers struggling to repay in now stronger dollars.

In this episode of instability, well-meaning government policies aimed at protecting savers and accommodating borrowers interfered with risk bearing and risk management. Encouraged by regulation and tax policy, the thrifts and a government-sponsored financial intermediary lent to homeowners on a long-term, fixed-rate basis. These loans were financed by shorter term deposits and bonds guaranteed by the government. The increased volatility of interest rates made this a very risky strategy. Fluctuations in real property values revealed the deficiencies of limited-purpose lenders such as the Farm Credit System. Barriers to interstate banking inhibited diversification of lending risks, many of which have large regional components, and increased the likelihood of the insolvency of many financial institutions. Concern for the security of pension beneficiaries created a pension insurance system that generates a large subsidy, encourages abuse, and in only 10 years of operation, has created a large liability that the taxpayers may have to assume.

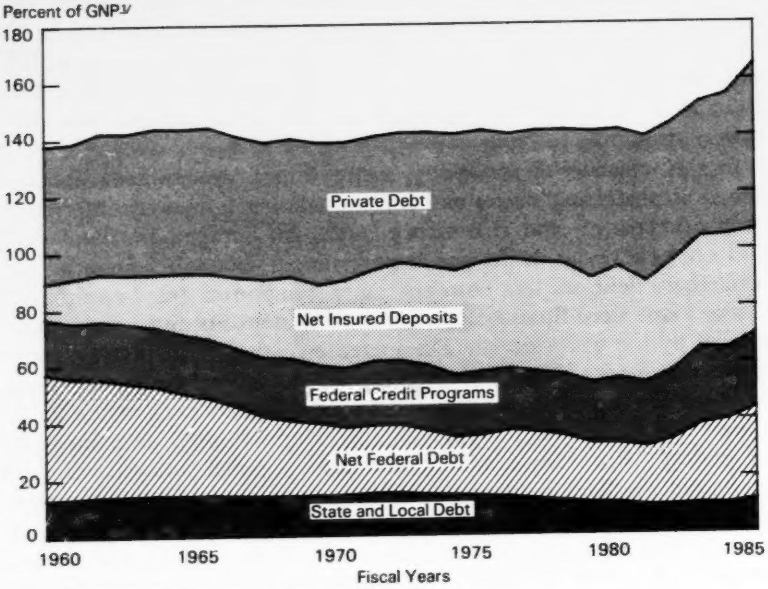
This chapter analyzes government policy as it shapes the institutions that must cope with both the risks of lending and the risks of macroeconomic policy as well. It examines Federal loan programs and five government-sponsored financial intermediaries which execute much of government credit policy. It also analyzes the incentives and outcomes of insuring deposits at commercial banks and thrift institutions and insuring the income from certain pension plans. This chapter concludes with a discussion of the relationship between the deregulation of financial institutions and some of the problems these institutions have recently experienced.

THE SIZE OF THE FEDERAL ROLE IN CREDIT MARKETS

At the end of fiscal 1985 nonfinancial debt outstanding (the sum of the debt of households, nonfinancial businesses, and Federal, State, and local governments) totaled $6.5 trillion. Chart 6–1 shows the development of Federal involvement in the credit markets between 1959 and 1985, by type of debt outstanding, as a percent of gross national product (GNP).

Chart 6-1

Debt of All Nonfinancial Sectors
As Percent of GNP



[1] Debt at end of fiscal year as percent of GNP for fiscal year.

Source: Council of Economic Advisers, based on data from various government agencies.

The bottom layer of the chart represents the outstanding debt of State and local governments, which has remained stable in relation to GNP. The next layer up is Federal debt outstanding less direct Federal loans (made to households and businesses). Direct Federal loans are subtracted because they represent government borrowing for the purpose of relending, and hence constitute a portion of the Federal debt that is financial. Direct Federal loans are included in the next layer of debt.

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The third layer of debt consists of loans made or guaranteed directly by the government, plus loans made or guaranteed indirectly by the government through government-sponsored financial intermediaries. The total outstanding debt from these Federal credit activities was $1,038 billion at the close of fiscal 1985, which is approximately the same as the total assets of thrift institutions and just under half of the total assets of the commercial banks. These activities account for 22 percent of private (nongovernment) nonfinancial debt.

The Federal Government insured over $2 trillion of deposits at commercial banks, thrift institutions, and credit unions at the close of fiscal 1985. Many institutions use money raised through insured deposits to acquire instruments that already carry Federal guarantees or are obligations of the Federal Government. These instruments are federally guaranteed loans, Treasury debt, the debt of the government-sponsored intermediaries, cash, and reserves held at the Federal Reserve Bank. Subtracting the sum of these instruments from insured deposits yields the fourth layer—the net additional involvement of the Federal Government arising from deposit insurance.

Completely privately intermediated debt is represented in the top layer of the chart. Bank loans financed by bank capital coming from sources other than insured deposits are represented here. The debt of private corporations that issue bonds not guaranteed by the government is also represented here.

The level of government involvement as both borrower and lender has remained fairly stable between 1959 and 1985 at a surprisingly high 63 to 69 percent of total nonfinancial debt (including State and local debt). But the composition of borrowing versus lending has changed. The relative amount of Federal debt outstanding fell from the end of World War II until very recently, but was offset by a rise in the government's role as a lender and insurer of credit, from 23 percent of total nonfinancial debt in 1959 to 38 percent in 1985.

FEDERAL LOAN AND LOAN-GUARANTEE PROGRAMS

Federal credit programs have two primary effects on credit markets. First, they all provide subsidies transferring wealth to government-favored borrowers from the rest of the public. These subsidies create distortions in the economy by reallocating resources from higher to lower valued uses.

Second, these credit programs disperse lending risk nationally, bypassing barriers to interstate banking. Two benefits flow from national dispersion of risk. First, a more broadly based loan portfolio effectively diversifies away a significant portion of lending risk. In addition, the remaining nondiversifiable lending risk can be more easily borne if widely dispersed rather than concentrated in one region or one institution. Ultimately, diversification lowers interest rates for borrowers and reduces potential instability for the financial system as a whole.

DIRECT FEDERAL LOANS AND GUARANTEES

The government makes direct loans to finance agriculture, housing, education, medical facilities, purchases of arms by foreign governments, rural development, railroads, and other activities. These loans must be financed with either taxes or Federal borrowing. The Federal Government also redirects credit by guaranteeing the loans of certain borrowers, notably homebuyers, students, and small business owners.

Because the public bears the lending risk for direct Federal loans and loan guarantees, that risk is more widely dispersed than if the risk-bearer were a small commercial bank. In case of a default, the public absorbs the loss either in the form of higher taxes or higher government debt.

The costs of the direct loan and loan-guarantee programs are not measured in the cash-based Federal budget. The budget generally records outlays when cash is disbursed and records receipts when funds are received. The budget shows the cost of a new direct Federal loan to be the amount lent, and the net cost of direct lending programs to be new lending less payments of interest and principal on existing loans. For loan guarantees, a budgetary cost appears only if a guaranteed borrower defaults and the government has to make good on its guarantee.

To understand the cost to the public of Federal credit activity, consider the budgetary impact resulting from having the government contract with private lenders and loan insurers to loan to or insure parties for whom the legislature desired to subsidize borrowing. Private lenders and loan insurers would base their fees on the degree of risk assumed and the degree of subsidy provided, and would charge the government more for guaranteeing risky loans than sure ones. If the government paid up front for direct loan subsidies and guarantees, the cost would be accurately reflected even in the cash-based budget.

The Federal direct loan and loan-guarantee programs are not small. At the close of fiscal 1985, the Federal direct loan portfolio totaled $257 billion. This loan portfolio is larger than the combined loan portfolios of the two largest U.S. commercial banks, and represents 17 percent of the outstanding national debt held by the public. Federally guaranteed loans totaled another $410 billion.

The Office of Management and Budget estimates the subsidies provided through Federal credit programs. The Administration's 1987 (cash) budget proposes to reduce the subsidies by charging Federal credit programs for the use of the government's good name in the credit market. This would entail raising the fees on insurance programs such as the Government National Mortgage Association (Ginnie Mae), the Veterans Administration, and the Federal Housing Administration and imposing fees on the five sponsored intermediaries. While fees would not result in putting the cost of Federal lending and guarantees into the budget, it would put revenues into the budget to offset some of the costs borne by the taxpaying public from guaranteeing government loans and would reduce credit market distortions caused by these programs.

GOVERNMENT-SPONSORED FINANCIAL INTERMEDIARIES

The government moved in the direction of using the private sector in serving its credit goals by establishing five government-sponsored financial intermediaries. Three of these, the Federal National Mortgage Association (Fannie Mae), the Federal Home Loan Mortgage Corporation (Freddie Mac), and the Federal Home Loan Banks, serve the housing finance market. The Farm Credit System finances agriculture, and the fifth, the Student Loan Marketing Association (Sallie Mae), makes a secondary market in federally guaranteed student loans. Each issues securities (bonds, notes, and/or mortgage pass-throughs) and uses the proceeds to fund its lending activities. All of the five sponsored enterprises are now privately owned but maintain a special relationship with the Federal Government. Among the privileges enjoyed in this special relationship are exemption of their earnings from State and local income taxes, exemption of their securities from registration with the Securities and Exchange Commission, and eligibility of their debt securities for unlimited investment by most depository institutions.

Ideally, these institutions would pool and diversify risks and distribute any remaining risk to the parties most willing to bear it via national distribution of their debt and equity securities. Three of the sponsored intermediaries, Fannie Mae, Freddie Mac, and Sallie Mae, come close to this result. To what degree the government also shares the risk by guaranteeing their bonds remains an open question. In principle, the Farm Credit System distributes risk nationally through its bonds; but again, it is not clear how much risk is borne by the government rather than the bondholders. The Farm Credit System fails to disperse its equity risk nationally because the equity holders of the system are its borrowers.

Fannie Mae and Freddie Mac assist in providing lower cost credit to private financial institutions that in turn provide lower cost credit to homebuyers. There are two fundamental sources of this cost advantage: the implicit subsidy from association with the Federal Government, and the opportunities to diversify regional components of real estate lending risk.

The usefulness of the secondary market created by Fannie Mae and Freddie Mac resulted from restrictions on interstate banking. Large interstate banks could diversify mortgage-lending risks by holding portfolios of mortgages on properties across the country and by nationally distributing their equity shares. Without a secondary market for mortgages, equity holders of smaller banks and thrifts would be forced to bear all of the risk associated with changes in the value of property within a confined geographic area. They would naturally require compensation for bearing this risk. By creating a national market for mortgages, Fannie Mae and Freddie Mac provided a mechanism for diversifying away much of the geographically specific risk in mortgage lending, thereby lowering the rate of return required by the lenders and ultimately lowering the cost of borrowing.

Fannie Mae and Freddie Mac both make secondary markets in mortgages, but differ in the potential liabilities that they create for the public. Freddie Mac is owned by the thrifts and by the Federal Home Loan Banks, and acts primarily as an agent that buys, repackages, and sells mortgages. At the end of fiscal 1985 Freddie Mac held a portfolio of mortgages of only $13 billion and had an outstanding portfolio of mortgage-backed securities of $92 billion. Hence, Freddie Mac is exposed to relatively little risk from changes in interest rates.

Fannie Mae's equity is held by the public and its equity shares are traded on the New York Stock Exchange. In its mortgage pass-through operations, totaling $49 billion, Fannie Mae assumes no interest rate risk. But in its direct funding operations, another $97 billion, Fannie Mae takes considerable risk from possible fluctuations in interest rates because the average maturity of Fannie Mae's assets is longer than the average maturity of its liabilities. As a result, any rise in interest rates causes greater declines in the value of Fannie Mae's assets than in the value of its debt. As late as April 1984, when interest rates had already declined substantially from the peaks in 1981, Fannie Mae still had negative net equity on a market-value basis. Yet Fannie Mae's bonds continued to be priced as if they were near-Treasury securities, (rather than claims on Fannie Mae's portfolio) presumably because bondholders imputed a value to Fannie Mae's special relationship with the Federal Government.

The special relationship of Fannie Mae to the Federal Government benefits the equity holders of Fannie Mae as well. If Fannie Mae speculates on interest rates successfully, the profits belong to the equity holders. If the speculation is unsuccessful, the government is expected to absorb the loss. The continued success of the home mortgage market does not depend on government sponsorship of term intermediation. This is demonstrated by the success of the pass-through operations of both Fannie Mae and Freddie Mac, by the existence of markets in which institutions can hedge interest rate risk, and by the growing role of adjustable-rate mortgages.

Moreover, although substantial barriers to interstate and intrastate branch banking remain, the emergence of private firms in the secondary market for mortgages shows that government subsidies and government sponsorship are not necessary to support secondary mortgage markets. Fannie Mae and Freddie Mac do still enjoy subsidies and have a comparative advantage over private firms in their niche of the market. Private firms have concentrated on mortgages exceeding the size limits imposed on Fannie Mae and Freddie Mac. Fannie Mae and Freddie Mac are no longer unique in providing diversification services, but they are unique in operating under the aegis of the Federal Government.

THE FEDERAL HOME LOAN BANKS

The Federal Home Loan Banks (FHLBs) lend to the thrifts on substantial collateral and hence face very little risk through this lending. FHLB funding of the thrifts resembles the funding that the Federal Reserve provides to commercial banks through its discount window, except in term and size. The FHLB loans are both short- and long-term ($15 billion out of $80 billion is of more than 5-year term), while discount funding is typically overnight. As of August 1985 discount window borrowing totaled slightly more than $1 billion, financing less than 0.05 percent of commercial bank assets, while FHLB borrowing totaled $80 billion, financing 8 percent of thrift assets. The role of the FHLBs in diversifying thrift lending risk is minimal.

THE FARM CREDIT SYSTEM

The Farm Credit System (FCS) operates a network of primary and secondary lenders. The 12 Federal Land Banks (FLBs) make mortgage loans on farms and real estate, through 306 (as of the end of 1985) local Federal Land Bank Associations (FLBAs), to farmers and ranchers, rural homeowners, and farm-related businesses on terms of up to 40 years. Twelve Federal Intermediate Credit Banks provide loan funds to 216 Production Credit Associations (PCAs) and can discount agricultural loans from other financial institutions as well.

The PCAs make primarily 1-year operating loans to agricultural borrowers. In addition, the Central Bank for Cooperatives makes loans to the 12 district Banks for Cooperatives, which make short- and long-term loans for cooperative agricultural facilities.

The smallest entities of the FCS, the PCAs and FLBAs, are owned by their borrowers, who must buy stock in them in proportion to their loans. The PCAs in turn own the Federal Intermediate Credit Banks and the FLBAs own the Federal Land Banks. These, together with the Banks For Cooperatives and the Central Bank for Cooperatives, make up the Farm Credit System. The borrowers of these organizations reap the benefits of any profits made by the FCS in the form of lower interest rates on subsequent loans or in patronage refunds.

Much publicity was given to the losses of the FCS in 1985, a difficult year for agriculture. While the FCS as a whole did report a loss of $426 million for the first 9 months of 1985, it also reported remaining total capital of $8.5 billion on total assets of $80.5 billion. While the FCS will probably experience further losses through 1987, these income and equity figures show that the FCS as a whole is solvent.

The troubles of the FCS in 1985 varied greatly by region, supporting the contention that there is a strong regional element in agricultural lending risk. For the quarter ending September 1985 the FLBs in Omaha and Wichita reported losses exceeding 2 percent of total assets, while the FLBs in Texas and Sacramento reported positive income. Legislation passed in December 1985 established a regulator for the FCS and empowered the regulator to impose assessments on the district banks to pool their resources. The Administration believes that with this pooling of capital, the FCS will be able to cover anticipated losses.

The Farm Credit System has not inspired competitors, as have Fannie Mae and Freddie Mac. On the contrary, both the FCS and direct Federal lending to agriculture have gained ground compared with private alternatives. Market shares of agricultural lending for 1970, 1975, 1980, and 1984 are shown in Table 6–1.

Why has government and government-sponsored lending to the farm sector steadily displaced private lending? Private financial institutions have been at a disadvantage to the FCS and Federal direct loans on at least two grounds. First, the FCS's special agency status has lowered its borrowing costs, and of course, the funding for direct loans comes from the U.S. Treasury. Second, important actual and potential competitors, specifically commercial banks, have only limited ability to pool agricultural risk because of restrictions on interstate and intrastate branch banking. Insurance companies competing with

TABLE 6-1.—*Market shares of agricultural lending, 1970–84*

[Percent of total]

Source of lending	1970	1975	1980	1984
Government direct and sponsored programs	32.6	35.6	44.5	48.1
Farm Credit System	23.2	29.6	31.1	31.9
Farmers Home Administration	6.0	5.6	10.7	12.1
Commodity Credit Corporation	3.4	.4	2.7	4.1
Private sources	67.4	64.4	55.5	51.9
Commercial banks	27.3	28.9	22.1	23.5
Individuals and others	29.8	28.2	26.3	22.5
Life insurance companies	10.3	7.3	7.1	5.9

Note.—Data for end of year.

Source: Department of Agriculture.

the FCS, however, do have access to national capital markets. Over these potential competitors, the FCS had no advantage except its subsidy. These comparisons suggest that the subsidy, not the access to national markets, was the primary force behind the increased share of government-affiliated lending to the farm sector.

The FCS has a method of allocating equity risk that exacerbates the difficulties of agricultural borrowers in hard times. Each owner/equity holder's share of the capital in the local borrower-owned unit is a proportion of his or her borrowing from the institution. When capital contributors believe their capital is at risk, they can withdraw it by going to another institution and borrowing a sufficient amount to pay off their FCS loans. The remaining borrowers are those who cannot go to alternative institutions for loans except at much higher interest rates, if at all. This system has two unfortunate consequences. First, "equity runs" can leave the FCS with only the lower quality loans when times are difficult. Second, when farmers have a difficult year due to poor crops or low prices, their equity investment in their local FCS institution does very poorly.

Strictly speaking, agricultural credit has been subsidized through the special relationship of the FCS and the Federal Government. But all things considered, it seems that agricultural borrowers are not well served by their credit markets. Commercial banks cannot serve the agricultural borrowers as well as they might because of the barriers to interstate and intrastate branch banking. The FCS makes only agricultural loans, and hence can diversify only across agriculture. By forcing farmers who borrow from it to be its equity holders, the FCS prevents them from transferring equity lending risk to other parties.

SALLIE MAE

The youngest and smallest of the government-sponsored intermediaries, Sallie Mae, makes a secondary market in federally guaranteed student loans. It also buys these loans for its own portfolio, financing the purchases by selling bonds. Organized as a private corporation with shares traded on the New York Stock Exchange, Sallie Mae has earned on average slightly more than 30 percent of net worth annually over the past 5 years. Little implicit government subsidy is currently provided directly to Sallie Mae (as distinct from the large subsidy that is provided on the federally guaranteed student loans). If the role of this enterprise was to demonstrate, with a temporary subsidy, that a secondary market could be profitably made in guaranteed student loans, its mission is accomplished. It is therefore appropriate to consider making Sallie Mae a fully private organization. The Administration will investigate this possibility in 1986.

FEDERAL DEPOSIT INSURANCE

Insured deposits in commercial banks, thrift institutions, and credit unions now stand at more than $2 trillion, making deposit insurance by far the largest of the Federal guarantees in the credit markets. Deposit insurance is intended to prevent runs on these depository institutions (here called "banks" when discussed as a group) that can degenerate into general banking panics. Runs occur when depositors become concerned that an institution's assets may not be able to cover all of its deposits. Depositors "run" to be first in line to withdraw their deposits. Because the typical bank's assets are for the most part illiquid, even a bank whose assets are larger than deposits plus other liabilities can have considerable difficulties in accommodating large, sudden withdrawals of deposits.

From the point of view of averting runs, it does not matter whether a deposit insurance corporation stands ready to make deposits good or a lender of last resort is ready to lend to institutions plagued by runs, so long as depositors believe that the backer will in fact support the deposits. Assuring this support is a particularly difficult problem for deposit insurance. Conventional insurance, for example life insurance, operates on the principle of insuring many uncorrelated risks. But bank runs tend to be contagious. The only insurer that unambiguously has the capacity to meet any run, no matter how large, is one with the power to print money. This gives the government a comparative advantage in providing deposit insurance.

The role of deposit insurance is not so much to pool, diversify, and eliminate risks, as conventional insurance does, but to change the way in which certain risks are borne. While there is a large diversifiable component to lending risk, there remains a large nondiversifiable component that must simply be borne. Without deposit insurance, the risk is borne by both equity holders and depositors, leaving the banking system vulnerable to occasional collapses through runs. With deposit insurance, the risk is borne by bank equity holders and by the public.

Deposit insurance imposes risk on the public because it prevents loss to depositors not only from runs on solvent institutions but also from defaults on loans and, if the maturity of the bank's assets and liabilities are not matched, from changes in interest rates. Without the inherent uncertainty regarding the value of bank assets there would be no reason for runs. Thus, maintaining deposit insurance requires insuring against these events, as well as against mere illiquidity.

When a bank is insolvent due either to defaults on loans or fluctuations in interest rates, the loss may be treated several different ways. First, it could be met by an insurance fund capitalized with accumulated insurance premiums. Should the loss exhaust the fund, the additional loss could be borne either by collecting taxes to pay off depositors or printing money to pay off depositors. If printed money is the solution, the cost is borne in the form of a general rise in the price level. The government could, of course, issue bonds to cover the loss, but these bonds would ultimately be repaid either by collecting taxes or by printing money.

On the other hand, when no real insolvency is present, the central bank can be called upon to serve simply as a temporary provider of liquidity. The central bank extends a loan to the temporarily illiquid bank and receives repayment; this imposes on the public only the cost of administering the transaction less interest collected on the loan.

ADVERSE INCENTIVES OF DEPOSIT INSURANCE

Insuring deposits encourages bank owners to take on more risk than they otherwise would. As long as the bank pays interest competitive with rates available on similarly safe investments, insured depositors have no reason to withdraw their deposits, even from a bank engaging in risky lending.

Equity holders of banks are usually not protected when a bank fails, but even when they lose their entire investment they still are not responsible for all of the losses of unsuccessful lending. Part of the loss falls on the deposit insurer. Because the deposit insurance fee is not adjusted to reflect the increase in risk borne by the deposit insurer, the bank owners have incentives to take account of only that part of increased risk that is borne by equity holders—and not the increased risk absorbed by the deposit insurer.

For depository institutions with substantial amounts of equity capital relative to their assets and other liabilities, the incentive to engage in excessively risky activities is limited. After all, equity holders have a lot to lose before the deposit insurer steps in. For depository institutions with low equity capital, and especially for institutions with negative equity capital on a market-value basis, the incentive for excessive risk-taking can be quite strong.

To reduce excessive risk-taking encouraged by deposit insurance, regulators impose two kinds of restrictions on depository institutions. First, they subject institutions to "capital adequacy" requirements. Second, they impose portfolio regulations that restrict institutions as to the kinds and amounts of different activities. Two other approaches have been suggested: risk-adjusted deposit insurance and risk-adjusted capital requirements.

CONTROLLING ADVERSE INCENTIVES: CAPITAL REQUIREMENTS

In principle, the goal of capital requirements is to ensure that bank owners have much to lose if they do not invest the bank's funds prudently. Of course, the deposit insurer must be willing to carry through with its threat to close institutions not meeting the requirements. If capital requirements worked perfectly, regulators would close a bank with insufficient capital before the capital was zero or negative, and the public would bear no loss through deposit insurance. In practice, capital requirements have some serious flaws.

The most serious flaw is that the regulators' measure of capital is a poor gauge of the true market value of the owner's stake. Regulatory measures of capital generally reflect changes in the value of bank assets and liabilities on the bank's financial statements only when assets and liabilities are bought or sold. However, market values of many assets and liabilities change, sometimes quite substantially, without any transactions being made. In particular, the market value of long-term, fixed-rate loans and mortgages fluctuates with changes in interest rates, just as does the market value of long-term bonds. Regulatory methods of accounting, however, value long-term, fixed-rate loans and mortgages at the interest rates that prevailed when the loans and mortgages were made, that is, at book value rather than at market value.

Fluctuations in interest rates are not the only force that changes the market value of bank assets. Loans to foreign countries, for example, or on real estate or agricultural properties, may change in value because of changes in expectations about when and if the borrower will repay. For these kinds of loans, there is a limit to the use that can be made of observable, competitive market prices to adjust asset values. Banks do, after all, find their comparative advantage in gathering and assessing information about borrowers, and it is unlikely that other parties could provide better information on asset quality than do the banks themselves. Nonetheless all loans change in value with changes in interest rates, and more accurate accounting can be achieved even for these loans by making adjustments for interest fluctuations.

Flaws in the measures of net worth used to set capital standards lead to two problems. First, capital requirements often do not control the adverse incentives for risk-taking that they were designed to combat. Because capital requirements are based on book rather than market measures of capital, a fall in the value of a bank's assets often does not affect its capital adequacy until the cash-flow consequences begin to impinge on its ability to pay its bills. This event could be many years hence. But the fall in value immediately affects the incentives of the owners of the institution. As pointed out above, insured institutions with very low or negative net worth have especially strong incentives to engage in excessive risk-taking.

The second problem is that transactions that impair book capital, but otherwise are desirable for both the institution and the economy, are discouraged, and transactions that enhance book capital, but are otherwise undesirable, are encouraged. For example, a bank that forecloses on property due to a loan default typically takes that property onto its books at assessed value. Banks have for the most part not found their comparative advantage in managing real property, and would probably want to sell the property, even if it fell further in value. But if the market value is less than the book value, sale will lower the bank's regulatory capital; hence the property may not be sold. On the other hand, a bank with a big capital gain on its own building may sell that building simply to get the capital gain onto its books and thus raise its regulatory capital.

PORTFOLIO REGULATION

Besides imposing capital requirements, regulators of financial institutions attempt to control risk exposure by directly imposing limits on investment activities. These controls impose a considerable burden on the regulator in terms of risk assessment and prediction. In addition, they reduce market flexibility in allocating credit. They do not merely introduce incentives, but legally limit many kinds of activities and preclude others.

RISK-ADJUSTED DEPOSIT INSURANCE

A suggestion for reducing risk-taking incentives is to risk-adjust deposit insurance premiums. The Vice President's Task Group on the Regulation of Financial Services recommended that deposit insurers be permitted to do this. Risk-adjusting deposit insurance premiums would have two beneficial consequences. First, institutions involved in more risky activities would be charged for increasing the public's risk exposure. Second, basing the premiums on risk would reduce incentives for risk-taking and thus promote overall financial stability.

The principle of risk-adjusted deposit insurance is appealing. In practice, however, it presents unresolved practical problems. First, how do regulators assess the riskiness of different lines of bank activity? Second, would such assessments be useful in predicting the future riskiness of the same lines of activity? For example, it is unlikely that the deposit insurer could have foreseen either the change in the riskiness of lending to oil and gas concerns or the significant change in the volatility of interest rates that occurred in the 1970s. Third, can the deposit insurer appropriately capture the portfolio effects of bank activity? A bank that has equal proportions of its assets in real estate loans, farm loans, oil and gas loans, consumer loans, and so on, may have a loan portfolio consisting entirely of activities judged risky by the deposit insurer. But with the wide assortment of lending activity, the exposure to the deposit insurer could be small as a result of portfolio effects. Fourth, how much will the institutions that present the biggest problems in terms of risk control—those that are nearly insolvent anyway—be influenced by deposit insurance rates? If the equity in an institution is inconsequential, equity holders will not hesitate much to spend someone else's money (the deposit insurer's) in order to take on more risk.

RISK-ADJUSTED CAPITAL REQUIREMENTS

In January 1986, the Board of Governors of the Federal Reserve announced that it will formally consider the imposition of capital requirements based on assessments of the risk of bank assets. In terms of implementation, risk-adjusted capital requirements are subject to the same practical problems of risk assessment as risk-adjusted deposit insurance premiums.

Risk-adjusting capital requirements versus deposit insurance is analogous to varying insurance deductibles versus insurance rates. The risk faced by an automobile insurer for a given policy, for example, is a function of the age and record of the driver, and also of the amount deductible before the insurance coverage begins. Generally speaking, the larger the deductible, the cheaper the insurance. Risk-adjusted capital requirements force a bank to have a higher deductible if it engages in more risky activities. Risk-adjusted deposit insurance with the standard capital requirement allows all the banks the same deductible but charges them different rates depending on their activities.

In principle, there seems no reason not to use both devices to control risk exposure. The risk-adjusted capital requirements give the regulators one more lever against the exaggerated risk-taking incentives of nearly insolvent institutions. If a nearly insolvent institution increases the risk of its portfolio without increasing the owner's stake, it can be closed. But of course this could be done simply with more strict enforcement of existing capital requirements.

None of the devices for controlling adverse incentives introduced by deposit insurance is perfect. Risk-based deposit insurance premiums and capital requirements introduce desirable incentives, but may be weak and difficult to administer effectively. Portfolio regulation helps to control the public's risk exposure, but it also requires the regulator to make difficult judgments regarding lending risk and reduces the role for markets in allocating credit. The last, capital requirements, corrects for the adverse incentives of deposit insurance and helps control the risk exposure of the public, but it is effective only if the requirements are based on definitions of capital that are economically meaningful and are executed by a regulator willing to close institutions with insufficient capital.

THE THRIFTS

The most serious challenge to the system of deposit insurance since it began in 1933 was the insolvency of the thrift institutions in the early 1980s. This industry is composed of more than 3,000 lending institutions (savings and loan associations and some mutual savings banks) with total assets (at book value) of about $1 trillion in 1985. Congress intended the thrifts to serve the home mortgage market and offered them tax incentives to hold a large fraction of their portfolios in home mortgages. Deposits with interest ceilings and loans from the Federal Home Loan Banks financed the thrifts at lower-than-market interest rates. Responding to these incentives, thrifts typically held 60 percent or more of their assets in long-term mortgages, virtually all of which were fixed-rate prior to 1981.

Until the 1970s thrift institutions lived comfortably with their mismatched portfolios because interest rates remained relatively low and stable. With the rise in interest rates from the early 1970s to 1981, however, the cost of funds to thrift institutions rose above the interest earned on their portfolios of long-term, fixed-rate mortgages. By generally accepted accounting principles (GAAP), many thrifts began to show negative net incomes in the early 1980s as their long-term assets fell in value much more than did their liabilities. As of 1981 the thrift industry as a whole had an estimated negative net worth of $110 billion on a market-value basis. Interest rates have moved in favor of the thrifts since 1981, and the June 1985 estimate of their value corrected for changes in interest rates (but not asset quality) is above zero for the first time in many years.

To deal with the insolvency of the early 1980s, thrift regulators lowered capital requirements and redefined capital. For regulatory purposes, thrift regulatory capital is no longer defined by GAAP (the standards applied to commercial banks) but by regulatory accounting principles (RAP). RAP allows thrifts to reassess certain fixed assets. If the appraised equity value exceeds the price originally paid, which is the book value, the appraised equity value may be entered on the balance sheet. An institution whose property has gone down in value, however, need not declare the lower value on its balance sheet. In addition, thrifts can amortize losses on assets they sell. For example, if a thrift sold a home mortgage that was 10 years from maturity for $50,000 less than its book value, the institution could declare its loss at $5,000 per year for 10 years. The loss would have only a gradual impact on the regulatory capital.

In addition, two programs were created in order to give certain thrifts the appearance of having more equity. These were the net worth certificate program and the income capital certificate program. Both involve a mere bookkeeping entry in which the Federal Savings and Loan Insurance Corporation (FSLIC) becomes an equity holder in a thrift, with a few strings attached in terms of the investments thrifts can undertake. FSLIC counts its paper "investment" in the thrift as an asset, and the thrift counts FSLIC's "contribution" of capital as equity for purposes of meeting capital requirements.

These programs to boost the regulatory net worth of thrifts kept many of them officially solvent when on the basis of GAAP—let alone market-value—they were insolvent. The programs did not affect the market value of these institutions, but merely bought time during which regulators hoped, not in vain, for lower interest rates. In effect, the thrift regulators made a judgment (like the judgments frequently made by creditors of insolvent enterprises) that the deposit insurance funds and ultimately the Treasury and the country had more to gain from keeping insolvent thrifts operating than from closing them down.

Although the thrifts, as a group, no longer have negative equity by market value, the full returns of this experiment in term intermediation are not yet complete. Four serious problems still remain. First, many thrifts with negative net worth continue to operate, and many of these continue to lose money. Second, the resources FSLIC has available to close failed institutions are very strained. Third, the industry as a whole is poorly capitalized, even by its own standards, and the capital standards of the thrifts are well below those of the commercial banks. And fourth, the thrifts are still exposed to considerable interest rate risk.

As of June 1985 there were 88 thrifts with total assets of $16.8 billion with negative net worth by RAP measures. By GAAP measures, 461 institutions with total assets of $111.4 billion had negative net worth. Allowing insolvent institutions to operate greatly increases the burdens of the Federal Home Loan Bank Board (FHLBB) and the FSLIC in controlling the continuing losses and risk-taking of insured institutions. It is not yet clear how successful thrift regulators have been in controlling the incentives for excessive risk-taking by insolvent insured institutions.

Many of the currently insolvent institutions will likely remain insolvent. What to do about these institutions will involve difficult choices. During fiscal 1984, FSLIC found the cost of closing insolvent institutions to be 14.7 percent of the book value of their assets, and found that many institutions had serious asset quality problems. If asset quality problems worsen, the costs could rise. But interest rates have fallen, so the costs may fall.

Many insolvent institutions could be taken over by solvent institutions, and with infusions of capital from them (and perhaps other sources) once again have sufficient equity to inhibit excessive risk-taking. Hence, a judgment must be made regarding which financial institutions will be allowed to buy failed thrifts. For the most part, the FHLBB has attempted to resolve problem cases by merging failing institutions within the traditional boundaries of the thrift industry. Regulators have sought acquirers for insolvent institutions first among nearby thrifts, then in the same State, then in adjacent States, and only after these avenues proved unfruitful have they opened the market nationally. The cost to the public of closing these institutions may well be lower if the market is widened to commercial banks and other financial institutions as well.

As FSLIC has closed and liquidated insolvent institutions for which it could not find a merger partner, it has acquired a portfolio of assets from institutions whose depositors it paid off. FSLIC itself needs to liquidate these assets in order to have cash with which to close additional insolvent thrifts. But FSLIC has found some of these assets, such as unfinished real estate development projects, to be difficult to dispose of. To be able to liquidate troublesome properties more quickly and at better prices, the FHLBB has set up a new quasi-government organization, the Federal Asset Disposition Association (FADA), which will be exempt from many of the salary and staffing restrictions FSLIC faces as a government entity.

The FHLBB has announced that it intends to restrict FADA to operating only as a sales management organization and only for FSLIC.

Should these restrictions be relaxed, potential problems with FADA include the possibility of it growing into another liability for taxpayers.

Resolution of the problems in the thrift industry should involve first, closing or recapitalizing insolvent institutions. Recapitalizing is not a simple task, as it entails either finding new investors (possibly institutions) that will invest their own funds, or reorganizing debt holders of the failed thrift into equity holders. Second, the thrifts should use capital requirements and definitions of capital that are economically realistic and consistent with the standards of commercial banks. Third, it may be appropriate to reconsider the wisdom of designating limited-purpose lenders, including mortgage lenders. The commercial banks have been very active in mortgage lending, and their activity plus the success of firms in the secondary market for mortgages makes clear that mortgage lending does not require a separate, subsidized financial sector. Fourth, term intermediation is risky not only for individual institutions, but also for the economy as a whole. The effort succeeds only so long as interest rates and inflation rates are stable. Consequently, existing regulatory incentives for exposure to interest rate risk should be eliminated, and policies that result in stable interest rates and price levels should be promoted.

INSURED PENSION BENEFITS

The Employee Retirement Income Security Act (ERISA) of 1974 requires almost all companies having "defined benefit" pension plans to purchase insurance from the Pension Benefit Guaranty Corporation (PBGC), a government entity established by the ERISA. Insured firms may terminate their pension plans at any time by filing with the PBGC. When a firm terminates its plan, the PBGC assumes both the liabilities (the promises made by the employer to the employees in terms of retirement benefits) and the assets of the pension plan. The PBGC also has the right to as much as 30 percent of the company's equity. Currently, the PBGC insures the pension benefits of 38 million people. By October 1985, the PBGC had taken over more than 1,200 pension plans covering 190,000 persons, and had accumulated a deficit of about $1.3 billion, more than two-thirds of it in 1985. Because the PBGC operates under public auspices, the public may ultimately have to assume the difference between the premiums it collects and the pensions it pays. Legislation to raise the premiums charged by the PBGC is pending.

"Defined contribution" pension plans resemble ordinary savings accounts, except that contributions (deposits) are tax-deductible and interest accumulates tax-free. In a defined contribution plan, employee and employer contribute to an account; after a vesting period (typically 3 to 5 years), the account essentially belongs to the employee, although use of it is generally restricted. Defined benefit pension plans typically promise an employee income in retirement based on ("defined by") the number of years of employment and the wages earned in the last years of employment. Strictly speaking, the promise is independent of how much the employer actually sets aside to pay these promised benefits, although ERISA imposes minimum funding standards. Assets set aside to fund these promises are held in trust. A pension plan is "fully funded" if the assets are at least adequate to cover the present value of the employer's promises, and "underfunded" if the assets are inadequate.

Insurance premiums collected by the PBGC are set by statute and are currently far too low to cover its anticipated liabilities. Because the government assumes responsibility for the soundness of the pensions and collects far less from the insured parties than its guarantees are worth, its insurance performs as a subsidy. Prior to the passage of ERISA, the degree to which ailing companies with underfunded pension plans could substitute pension promises for wages was limited by employees' assessments of the company's ability to make good on such promises. With the establishment of the PBGC, a company can make generous retirement benefit promises to employees, and pay employees lower wages than it otherwise would, because both parties know that if the company fails, the PBGC will honor the pension obligations (up to ERISA-limited amounts).

The companies most likely to abuse PBGC pension insurance are those doing poorly. Companies losing money enjoy no tax benefits from fully funding a pension plan and are also less likely to be able to deliver on pension promises with company assets. Yet premiums depend neither on the riskiness of the assets with which the portfolio is funded nor on the level of funding (above ERISA's minimum). This implies that even if premiums were set so that on average they covered the expected liabilities of the PBGC, ERISA would redistribute wealth from the employees and employers of healthy, low-risk companies with funded plans to the employees and employers of ailing or high-risk companies with underfunded plans.

In analyzing the economic effects of ERISA, it is instructive to consider how private companies would price pension insurance and how pension sponsors would respond. For the sake of the argument, suppose the government simply required all firms to insure their pension plans, much as State governments require individuals who own and operate automobiles to carry liability insurance, and left it up to private firms to provide that insurance. Insurance premiums would then reflect the riskiness of the assets securing the pension benefits. Premiums for an underfunded plan would primarily reflect the riskiness of the assets of the sponsoring company. Premiums for a funded plan would reflect the riskiness of the portfolio of securities with which it was funded. Incentives to underfund the pension plan or to fund it with more risky securities would be reduced. The ERISA-caused redistribution of wealth from employees and employers of fully funded plans in healthy companies to employees and employers of underfunded plans in ailing companies would disappear.

A full analysis of the pension insurance issue must consider the question of why some pension plans were underfunded in the first place. Did these underfunded plans simply occur because employers were irresponsible and employees were ignorant of the situation?

Several studies by economists conclude that underfunded pension plans are a device that gives unions and firms a common interest and helps to resolve disputes over how to divide the firm's revenues. By underfunding the pension plan, a firm effectively makes employees who are covered by the plan long-term bondholders in the firm.

This need for a common interest is acute in industries where firms have large "sunk" costs, such as those involved in heavy manufacturing. Firms invest in capital only when they believe that long-run income will cover the costs of the capital. The costs are paid up front. Because its capital costs are sunk, the firm will continue to operate as long as it can cover variable costs, even if its income falls considerably below what was expected. Thus, unions could raise wages and lower the firm's income, without endangering jobs, once the capital investment has been made.

Anticipating that the union will raise wages once an investment is complete, the firm will be less likely to make the capital investment in the first place. Both parties, as well as consumers, are potential losers. The firm loses income from a profitable investment. Workers lose jobs. Consumers lose the value of the firm's products. This conflict of interest can be resolved to the benefit of both the firm and the union by creating a common interest—making the employees security holders in the firm via underfunding of the pension plan.

The evidence in favor of this view is first, the association of defined-benefit pension plans with unions. One study shows that while 25 percent of non-union participants are covered primarily or solely by a defined-contribution plan, virtually no unionized participants have such coverage. Second, virtually all systematic underfunding is associated with unions. Pre-ERISA, plans for union members had funding ratios (funded assets as a proportion of total liabilities) that were on average 30 percent lower than the funding ratios for plans covering non-union employees.

If the underfunded plan was a device for aligning the interests of firms and unions, the passage of ERISA should give cause for companies to seek other devices, and they have. Employee stock option and profit-sharing plans are other ways to give employees an interest in the value of the firm as a whole and not just in the wages they will collect from it. One study shows that companies with unions were 1.3 times more likely to introduce employee stock option or profit-sharing plans, post-ERISA, than were companies without unions. The same study found that over the pre-ERISA period 1968–73 unionized companies were only 0.6 times as likely to introduce such plans.

The passage of ERISA reflects the judgment that although underfunded pensions may have had an economic rationale, the security of retirement income is too important to be left hostage to union/firm disputes. The administration supports this judgment. But the agency that currently provides pension insurance, the PBGC, faces a serious and deteriorating situation. There are several options for dealing with PBGC's burgeoning deficit, including raising the premiums and also risk-adjusting the premiums. Policy in this area should seek to ensure that the Federal Government is not left holding the promises of employers who walk out on their pension responsibilities. It should also ensure that employees who have worked for their pensions—in some cases an entire lifetime—are provided with income in their old age. The cost of making good on underfunded pension promises should not be pushed onto the employers and employees of more responsible firms.

DEREGULATION AND THE FINANCIAL SYSTEM

The recent period of difficulty for many financial institutions coincided with a limited deregulation of financial institutions. Deregulation progressively eliminated ceilings on interest rates paid to depositors and gradually reduced restrictions on types of assets that could be held by thrift institutions. Legislative, legal, and regulatory actions substantially broadened the eligible range of securities market activities of depository institutions, and opened, although only partially, opportunities for interstate operation of depository institutions. The coincidence of deregulation with the problems of some financial institutions has led to the suggestion that deregulation is somehow responsible for these problems.

A more persuasive case can be made for the opposite conclusion—that inappropriate and excessive regulation, combined with inflation and then disinflation, contributed to an environment in which many depository institutions could not have continued to operate without deregulation.

The problems of the thrift industry derive fundamentally from funding long-term, fixed-rate mortgages with short-term deposits. The rise in interest rates made the thrifts temporarily insolvent. True, if the thrifts could have maintained pre-1979 interest rates on deposits, they would not have suffered so severely in 1981 and later, but these institutions could not have retained deposits at low, controlled interest rates. Much more attractive opportunities, notably money market mutual funds, had become available to their depositors elsewhere. And a massive outflow of deposits would have meant the collapse of many thrifts in 1981 or 1982, as they liquidated their mortgage portfolios—at well below book value—to pay off depositors. Therefore, deregulation of interest rates on deposits cannot be the reason for the problems of thrifts. Moreover, even if it had been possible to suppress the new alternatives to deposits, that would only have shifted the problems of the thrifts onto their depositors.

Relaxation of restrictions on assets held by thrift institutions can allow thrifts some benefits from diversification, but may also provide greater latitude for exploiting the deposit insurance system by undertaking highly risky loans and investments. Indeed, some of the current problems involve thrifts that have been established or have expanded rapidly since 1982. But the expansion of activities has two faces. Institutions may expose themselves to more risk, but they may also ultimately bear less risk as a result of more broadly based activities. Risk-adjusted deposit insurance premiums and more economically meaningful capital requirements can reduce the necessity for portfolio regulation.

The recent difficulties of the Farm Credit System and of many smaller commercial banks that lend heavily to agriculture are similar in important respects to those of thrift institutions. Due to either Federal designation or Federal barriers to interstate banking, these institutions have concentrated their lending in such a way that the value of their loan portfolios has been strongly and adversely affected by events associated with the inflationary and disinflationary process. The inflation that fed the boom in agricultural land values in the 1970s also fed the appetite for borrowing to finance farmland and equipment and made lending appear attractive. The decline in farmland values in the disinflation of the early 1980s undermined the security for these loans. In the case of the Farm Credit System, these problems were exacerbated by structural defects of that system. Deregulation of financial markets and institutions played no role. Further deregulation, however, might reduce such problems by allowing broader diversification of agricultural lending risk through lowering of barriers to interstate banking.

Similarly, the recent problems of some larger commercial banks derive primarily from their choices of loans and investments, and are not the consequence of deregulation. Some large banks that have lent to developing countries have suffered declines in the market value of their equity as the dollar rose and the market reassessed the value of those loans. Some banks that aggressively expanded their loan portfolios by making loans that other institutions were reluctant to fund have suffered losses. Other banks that concentrated lending in industries such as oil and gas drilling have suffered from the declines in these industries.

The episode of increased volatility of interest rates and inflation has resulted in some changes that have made U.S. financial institutions better able to cope with risk of all kinds. Some changes, notably deregulating interest rates, lessening of the barriers to interstate banking, and loosening of portfolio restrictions, were made by regulators. Other changes, such as the introduction of new financial instruments for hedging risks, were the innovations of private markets.

The deregulatory effort should not be regarded as complete. The most promising changes would eliminate aspects of government policy that inhibit diversification. First, it is time to move toward true interstate banking. It is no accident that 97 percent of the outstanding financing provided by the five government-sponsored intermediaries goes to housing and agriculture. Regional components are large in both housing and agricultural credit risk, and if the financial institutions are able to diversify this risk, credit for these borrowers will be less expensive and the markets will allocate credit more efficiently than if it cannot be diversified.

Banks keep, rather than sell, many mortgage, farm, and other loans for which there are currently secondary markets. This suggests that there are costs to gathering and disseminating information about borrowers that make it efficient for loan originators to keep many loans. Given that this is so, there are probably many loans—those with large regional risk components but also complex information about borrowers—for which the most efficient and lowest cost holder is neither a small local bank nor a secondary market customer, but rather a large interstate bank. Large States, such as California and New York, have greater opportunities for intrastate diversification than do smaller States with less variety in their economies. The experience of the large States shows that big banks, little banks, and secondary markets all have a natural place in the financial sector of the economy.

A similar argument for diversification calls for rethinking the designation of limited-purpose lenders, such as the thrift industry and the Farm Credit System. Eliminating the barriers to diversifying across activities would decrease the probability of failure of these institutions. It would also decrease the likelihood that these institutions might ever pose a macroeconomic threat to the financial system.

Second, the risk that cannot be eliminated through diversification needs to be controlled more effectively by the system of deposit insurance. Deposit insurance can be reformed so that it no longer provides incentives for depository institutions to undertake excessive risk, including the risk inevitably associated with funding long-term, fixed-rate mortgages via short-term, interest-sensitive deposits. Deposit insurance reform should include revisions of regulatory accounting. Shareholders and managers of financial institutions should be made to bear—promptly and effectively—the good and bad consequences of the operations of the institutions they own and control.

Finally, it is essential to avoid the strains on the economy and the financial system that result from macroeconomic policies that induce volatile inflation and interest rates. In the recent episode of volatility, the financial services industry continued to operate smoothly in spite of the failure of many individual institutions. Many reforms have already made the remaining institutions more resilient to such risks, and further reforms can do still more. But even more robust institutions are not invulnerable. Life is risky enough without macroeconomic policy introducing additional uncertainty.

CHAPTER 7

The Economic Effects of Immigration

THE MOVEMENT OF PEOPLE BETWEEN COUNTRIES links national economies. Like international trade in goods, services, and financial claims, international migration connects domestic and international markets. The free flow of resources in response to market signals promotes efficiency and produces economic gains for both producers and consumers. The migration of labor, both domestically and internationally, represents such a flow of productive resources.

Most countries restrict the flow of international migrants. Emigration from a country is a basic human right established by the United Nations Universal Declaration of Human Rights, which states: "Everyone has the right to leave any country, including his own, and to return to his country." The right of immigration into a country, however, is not recognized in international law. Every country has sovereign power over the admission of foreign nationals, either as temporary visitors or as permanent residents. Many countries, most notably the U.S.S.R., restrict emigration as well as immigration.

The United States has a long tradition of assimilating diverse groups into the economic and political life of the Nation. Citizenship has been a traditional consequence of immigration to the United States, and persons born here are automatically citizens regardless of parentage. In many other countries, citizenship is based on lineage, not on birth in the country.

This Nation was largely populated and built by immigrants and their descendents. It remains one of the few major immigrant-receiving countries of the world, symbolizing personal freedom and economic opportunity. For more than 200 years, the U.S. economy has been strong, creating many millions of jobs at growing real income levels. For more than a century, per capita income has been many times higher than the level for most of the world's population. This strength and stability have attracted inflows of foreign capital and immigration.

Economic instability and poor prospects for advancement in many countries have encouraged emigration, while wars and political oppression have induced mass migration of persons in search of safety and political freedom. International migration has also been made easier by falling transportation costs and better information. Air transportation has significantly reduced travel times, and today's migrants can more easily maintain ties with friends and relatives in their home countries through modern communications.

An individual's decision to migrate, either within a country or across international borders, depends on whether the expected gains outweigh the expected costs. As with most investments, migration has initial costs while its gains are realized over time. An individual's moving costs are personal as well as financial, especially for an international move. Many migrants leave behind a known way of life, friends, and relatives, and they face a period of adjustment in their new country. The gains from migration are also personal as well as economic. In the case of a move to the United States, for example, gains may include greater freedom as well as the expectation of higher income. The economic success achieved by migrants depends on their ambition and entrepreneurial ability, on the skills and capital they bring with them, and on the skills they develop in the United States. Migrants are self-selected based on their ability and motivation to succeed in their new country.

National concern has arisen about the effects of international migration, especially illegal migration, on the United States. Immigration policy and the ability to control the country's borders have serious implications for the definition of national sovereignty. Although many illegal aliens are productive members of society who have established strong community ties, their presence violates U.S. law. Concerns exist as well regarding the social, political, and environmental consequences of immigration.

Immigration policy is not shaped by economic considerations alone, but immigration has important economic effects. Immigrants work, save, pay taxes, and consume public services. At the same time, there is concern that an influx of migrants might reduce job opportunities for some groups of native-born workers and reduce wages. Many are concerned that immigrants may increase the use of public services, including services they are not legally entitled to receive. Examination of these economic issues is a necessary part of the broader analysis of immigration policy. Although economic analysis helps illuminate some of the consequences of immigration, it does not address the fundamental importance of enforcing the law, nor does it suggest that illegal immigration is condoned.

MIGRATION TO THE UNITED STATES

From colonial times until the last quarter of the 19th century, the United States was open to immigrants from all over the world. The first restrictions on immigration were qualitative, barring convicts and prostitutes. Restrictions on immigration by nationality began in 1882 with the exclusion of the Chinese. Numerical restrictions were first instituted in 1921. These applied to immigration from the Eastern Hemisphere and were based on the composition by national origin of the U.S. population. Numerical restrictions on immigration from countries in the Western Hemisphere were first enacted in 1965.

The 1965 amendments to the Immigration and Nationality Act of 1952, which remain substantially unchanged, abolished the national origin system and set an annual ceiling on immigration to the United States. The worldwide annual ceiling for numerically restricted immigrants is now 270,000, with uniform per-country ceilings of 20,000. The amendments also established a preference system that emphasizes family reunification and, secondarily, employment considerations. The immediate relatives of U.S. citizens are, however, exempt from these provisions and ceilings, as are refugees and persons seeking political asylum.

The 1965 amendments permitted a shift of immigration from Europe to Asia. Prior to the 1960s, the majority of immigrants were European. European immigration first fell below 50 percent of the total in the 1960s, and it has continued to fall to just over 10 percent in the early 1980s. Asians represent an increasing share of total immigration, rising from 13 percent in the 1960s to about 50 percent in the 1980s. Asian immigration also increased because of the admission of Indo-Chinese refugees, beginning in the 1970s. The proportion of legal immigrants from Mexico has been stable at 10 to 15 percent for the past 35 years.

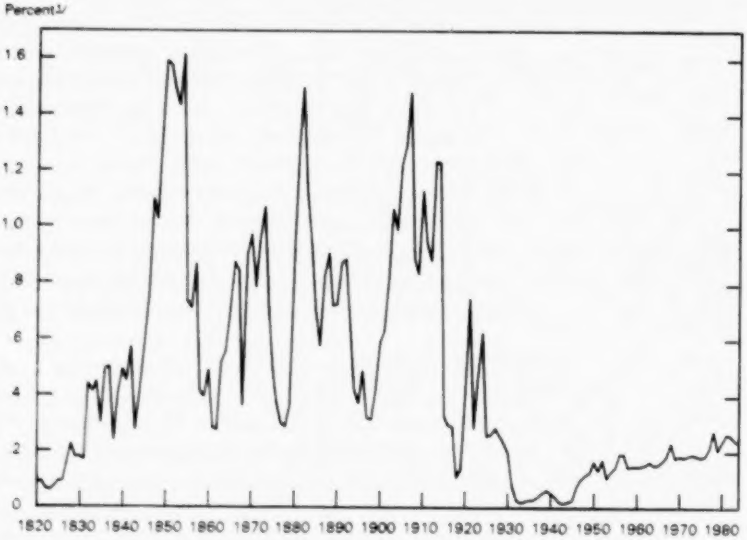
In recent years, legal immigration flows have been about 550,000 per year. These levels are significantly lower than they were early in the 20th century. Chart 7-1 shows immigration to the United States as a percent of the total U.S. population. Legal flows in recent years have been less than one-quarter of 1 percent of the population annually, about half the historical average. Including the estimated flow of illegal settlers does not raise this percentage to the historical average.

Flows of immigrants to the United States are also low relative to domestic migration. Between 1975 and 1980, approximately 20 million people migrated to a new State of residence in the United States. This compares with an overall inflow of 2.5 million immigrants over the same period.

The total foreign-born population in the United States in 1980 was 14.1 million. This represents 6.2 percent of the total U.S. population, which is also low by historical standards. This percentage fell steadily after 1910, but increased in the 1970s. Between 1970 and 1980, the

Chart 7-1

Legal Immigration as Percent of Population, 1820-1984



[1] Legal immigration for fiscal year as percent of July 1 resident population (including Alaska and Hawaii beginning 1940).

Sources: Department of Commerce and Department of Justice.

foreign-born proportion of the population grew from 4.8 to 6.2 percent. Much of this increase can be attributed to low U.S. birth rates and to an increasing flow of immigrants over the period. Even with this recent increase, however, the foreign-born proportion of the population in 1980 was less than half of what it was in 1910.

ALIENS ENTERING THE UNITED STATES

Aliens legally admitted to the United States can be classified into two broad categories—immigrants and nonimmigrants. Immigrants are admitted to the United States for permanent residence and are eligible to become U.S. citizens. Nonimmigrants are admitted for a temporary stay and for a specific purpose.

Immigrant admissions fall into three classes—numerically restricted, numerically unrestricted (mainly immediate relatives of U.S. citizens), and refugees and asylees. Nonimmigrants are composed for the most part of visitors who come to the United States for pleasure or business. They include temporary workers and students. Although nonimmigrants are admitted for a temporary stay, many of them, such as investors and students, remain here for a number of years. In addition, many aliens are in the United States illegally. Aliens may shift from one category to another during their time in this country. For example, visitors may apply to remain here permanently and undocumented settlers may attain legal resident status.

Table 7-1 shows the number of alien entrants to the United States in fiscal 1984. The figures vary in precision. Inflows of immigrants and nonimmigrants are based on administrative records and are reasonably accurate. Figures for deportable aliens and return migrants are far less reliable.

TABLE 7-1.—*Alien entrants to the United States, fiscal 1984*

Category	Number of persons
IMMIGRANTS	
Numerically restricted	262,000
Numerically unrestricted	190,000
Refugees and asylees adjusting to immigrant status	92,000
Total	544,000
Estimated return migration	133,000
Estimated net inflow	411,000
NONIMMIGRANTS	
Visitors for pleasure	6,595,000
Visitors for business	1,623,000
Temporary workers	69,000
Other[1]	1,140,000
Total	9,427,000
ESTIMATED DEPORTABLE ALIENS	
Settlers (net inflow)	100,000 to 300,000
Temporary migrants (average stock)	Less than 1,000,000

[1] These include but are not limited to foreign government officials, students, treaty traders and investors, and employees of multinational corporations.

Note.—Data are from U.S. Government administrative records, except for return migrants and deportable aliens.

Sources: Department of Commerce (Bureau of the Census) and Department of Justice (Immigration and Naturalization Service).

Immigrants and Refugees

A preference system controls the admission of numerically restricted immigrants. Preferential status is based on either a family relationship or a prospective job. A prospective immigrant must also prove that he is not likely to become a public charge. About 80 percent of numerically restricted immigrants are admitted under family preferences; the rest receive preference on the basis of occupation. In 1984, 262,000 immigrants entered the United States under this preference system.

Numerically unrestricted immigrants include alien spouses, minor children, and parents of adult citizens. In 1984 these immediate family members and a small number of numerically unlimited "special immigrants" totaled 190,000.

A separate system determines the admission of refugees. Under the Refugee Act of 1980, the President, in consultation with the Congress, annually determines the number and regional allocation of refugee admissions. Political asylum may also be granted to individuals who are in the United States and are able to prove to the Immigration and Naturalization Service (INS) and the Department of State that they are in danger of persecution on return to their home country. Refugees and asylees may adjust to permanent resident alien status after a year. In fiscal 1984, 79,000 refugees and asylees were admitted and 92,000 adjusted to immigrant status. By comparison, there are an estimated 10 million refugees worldwide.

Return migration is estimated by the Bureau of the Census to be about 133,000 per year, yielding a net inflow of legal immigrants and refugees in 1984 of about 411,000.

Nonimmigrants

Of the nearly 10 million nonimmigrants admitted to the United States in 1984, most were visitors for pleasure (6.6 million) or business (1.6 million). The 69,000 admitted for employment included temporary seasonal workers, trainees, or temporary workers of distinguished merit and ability such as scholars and musicians. More than a million others were in diverse categories such as foreign government officials and students.

Deportable Aliens

Millions of aliens cross the U.S. border every year; a small fraction stay legally, and fewer still stay illegally. The flow of undocumented migrants has been difficult to measure. Undocumented aliens, almost by definition, are not identified by any administrative system. The Bureau of the Census estimates that in recent years the net annual increase of undocumented settlers has ranged from 100,000 to 300,000. Thus, as many as 40 percent of all aliens who annually settle in the United States may be here illegally.

Many people believe that illegal crossing of the U.S.-Mexican border is the most common method of entry for deportable aliens. Ninety-four percent of apprehensions of illegal aliens are made at the border. Available information, however, shows that only about half of resident deportable aliens entered the country illegally. The other half of those illegally present in the United States are violating the terms of their nonimmigrant visas by overstaying or working. Because the annual flow of legal nonimmigrants is so large—almost 10 million—even a small proportion of overstayers can amount to a large absolute number who remain in the country illegally.

The Bureau of the Census estimates that the total number of illegal aliens in the United States in 1985 was 4 million to 6 million. Estimates are made separately for settlers and temporary migrants. The Bureau of the Census estimate for settlers is based primarily on its finding that it counted approximately 2.1 million undocumented aliens in the 1980 census. This estimate is derived by subtracting the estimated legal foreign-born population from the 1980 census count of the total foreign-born population. Other demographic evidence is used to take into account those undocumented aliens not counted in the census, yielding a range of 2.5 million to 3.5 million undocumented settlers in 1980. Comparing data from a 1983 Current Population Survey with the Decennial Census shows a net increase of 100,000 to 300,000 per year in the number of undocumented settlers. Assuming the same annual growth between 1980 and 1985 yields an increase in the undocumented alien population of 500,000 to 1,500,000 for the 5-year period. This increase, added to the estimate for 1980, results in an estimated range of 3 million to 5 million undocumented settlers in 1985.

The number of illegal temporary migrants is unknown, but demographers at both the Bureau of the Census and the INS believe that their average population is probably less than 1 million. Temporary migrants may work in the United States for years, months, or every day on a commuter basis.

Unsubstantiated estimates of the illegal alien population have ranged from 2 million to 15 million people. Some of these estimates reflect the number of illegal aliens apprehended by the INS, which increased sharply over the 1970s and reached 1.3 million in fiscal 1985. Apprehensions, however, are not an accurate basis for estimating the size or the growth of the illegal population. Apprehensions count incidents and not individuals. According to INS statistics, about 30 percent of those apprehended admit to at least one previous apprehension. Because the INS focuses its enforcement operations at the border, these counts underrepresent illegal aliens who have violated nonimmigrant visas. In addition, apprehensions reflect the effectiveness of enforcement as well as the volume of attempted illegal entries.

CHARACTERISTICS OF THE FOREIGN-BORN

The foreign-born population enumerated in the Decennial Census includes naturalized U.S. citizens as well as aliens, some of whom live here illegally.

Census data show that newly arrived foreign-born residents are younger on average than native-born Americans. The median age of those who entered the country between 1970 and 1980 was 26.8 in 1980, compared with 30.0 for the population as a whole. The newly arrived foreign-born are predominantly of working age. Seventy-seven percent of those arriving in the United States between 1970 and 1980 were 15 to 64 years of age in 1980, compared with 66 percent of the entire population. The Bureau of the Census estimates that illegal aliens are younger, on average, than legal immigrants.

The 1980 census shows that about half of the foreign-born who entered the United States between 1970 and 1980 were female. The proportion of females among illegal aliens, however, is estimated to be lower.

The recently arrived foreign-born have larger families than the native-born. On the average, there were 3.8 persons in families of those who came in the 1970s compared with 3.3 persons in native-born families. In addition, the proportion of the foreign-born more than 15 years of age who are married is higher than that of the native-born, and the proportion who are divorced is lower.

The distribution of educational achievement is much broader for the recently arrived foreign-born than for the native-born. A significant fraction has little education. Among those 25 years of age and older who entered the United States between 1970 and 1980, 13 percent completed fewer than 5 years of school as compared with 3 percent of the native-born. In contrast, 22 percent of the recent arrivals completed 4 or more years of college compared with 16 percent of the native-born.

Although U.S. immigration policy is based primarily on the humanitarian principles of family reunification and refugee resettlement, most of the foreign-born, including illegal aliens, enter the labor force. The employment-to-population ratio of recent arrivals is higher than that of the native-born. A higher proportion of the foreign-born work in blue-collar and service jobs: 39 percent of recent arrivals had blue-collar jobs compared with 32 percent for all U.S. employed persons; 18 percent held service jobs compared with 13 percent of the U.S. total. The incomes of those who entered the United States between 1970 and 1980 are lower on average than incomes of the native-born, but incomes of those who arrived before 1970 are similar.

The recently arrived foreign-born are concentrated in a few States. More than half live in California, New York, and Texas. Ten States accounted for 80 percent of total immigrants, and no other States had more than 2 percent of the total. The vast majority of the foreign-born live in metropolitan areas; one in five of the recently arrived foreign-born live in the Los Angeles area. Illegal alien residents tend to settle in the same areas as legal aliens, but they are even more geographically concentrated. According to estimates based on the 1980 census and INS data, 70 percent of illegal aliens were living in California, New York, and Texas, compared with 53 percent of legal alien residents.

EFFECTS OF IMMIGRATION ON OUTPUT AND INCOME

Market principles suggest that immigration in a competitive economy increases output and improves productivity. An increase in the supply of immigrant workers increases the output and earnings of other factors of production in the receiving country. Immigration provides increased returns to a wide range of inputs—capital, land, and workers with skills different from those of the immigrants. Inputs to production can become more effective as they acquire greater quantities of labor with which to work. This concept may be illustrated by several examples. A bulldozer on a road construction project is more productive if there are workers to keep it running for multiple shifts, repair it, and redirect traffic away from the construction site. A scientist is more productive if there are assistants to wash the test tubes and type manuscripts. A worker with family responsibilities is more productive if there are others in the household to help with child care and home maintenance. Increased economic returns that result from immigration may also lead to an increase in investment, producing an additional source of growth in output.

Although immigrant workers increase output, their addition to the supply of labor may change the distribution of income. Whenever the supply of labor increases, either because of immigration or increased labor force participation of native-born workers, wage rates in the immediately affected market are bid down. Although total employment in that market will rise, some of those who were initially employed at the higher pre-immigration wage rate may not accept work at the lower wage. Thus, native-born workers who compete with immigrants for jobs may experience reduced earnings or reduced employment.

Those who are concerned about job displacement caused by immigration often focus only on this initial effect. Job opportunities in labor markets where immigrant labor is complementary with native-born labor, however, are likely to rise. This increase in labor demand will raise wage rates and increase the employment of native-born workers—including those who may have been displaced from employment elsewhere. Demand for labor will also increase because the availability of immigrant workers encourages investment in industries

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that might not have been competitive otherwise. Moreover, the increased demand for goods and services that results from the consumer purchases of immigrants also tends to increase domestic employment. The aggregate effect of immigration depends on the responsiveness of workers and employers to changing labor market conditions and on the presence of market rigidities, such as the minimum wage, that may impede normal adjustment. As a general rule, increases in output, brought about by a greater abundance of labor and increased returns to other factors of production, outweigh reductions that may occur in the wages of workers who compete with immigrants. Consequently, the net effect of an increase in labor supply due to immigration is to increase the aggregate income of the native-born population.

The economic benefits of immigration are spread throughout the economy. These include increased job opportunities and higher wages for some workers as well as the widely diffused benefits of lower product prices and higher profits. Many people share in the higher returns on capital because capital ownership is widespread through personal and pension holdings. One in four Americans holds stock directly in U.S. firms. In addition, wage and salary workers own a considerable portion of productive capital, mainly through assets in pension funds. In contrast, job losses or wage reductions that may occur as a result of immigration are likely to be more visible than the economic gains. Such losses are likely to be concentrated among groups who compete directly with immigrant labor.

Some have suggested that labor market displacement may be widespread: In 1980, 6.5 million foreign-born residents held jobs, while a total of 7.6 million workers were unemployed. This view implicitly assumes that the number of jobs is fixed and that if immigrants find employment, fewer jobs will be available for the native-born.

Arguments supporting the restriction of immigration to protect American jobs are similar to those favoring protectionism in international trade, which is discussed in Chapter 3. Restrictions on immigration, however, like restrictions on trade, are costly. Limiting the entry of immigrant labor may increase the demand for some groups of native-born workers, but it will impose costs on consumers, investors, and other workers.

EVIDENCE ON LABOR MARKET EFFECTS

Studies have examined the effects of immigration on the employment levels and wage rates of the native-born. It is difficult, however, to isolate the effects of immigration from other factors that simultaneously influence job opportunities. These factors include characteristics of the immigrants themselves as well as industrial and other underlying characteristics of the labor market. A number of studies have attempted to identify these factors.

Some observers have pointed to immigrants who are employed in narrowly defined occupations and geographic areas as prima facie evidence that immigrant jobholders displace native-born workers. They cite the growth of ethnic enclaves in several industries, including agriculture, as evidence of possible displacement. It has been observed, for example, that the language of the workplace changes with the concentration of immigrants and that English-speaking workers may consequently be excluded from jobs.

Studies that focus on specific low-skilled occupations or on small segments of the labor market, however, are likely to overstate displacement effects by ignoring job and occupational mobility. Native-born Americans who hold jobs in one sector may move into other lines of work. This appears to be confirmed by more systematic studies of the labor market effects of immigration. Studies that take a broad view of the labor market have found no significant evidence of unemployment among native-born workers attributable to immigration. Any direct effects of immigration on domestic employment have either been too small to measure or have been quickly dissipated with job mobility. Although existing studies may not be conclusive, the evidence currently available does not suggest that native-born American workers experience significant labor market difficulties in areas that have attracted immigrants. Several studies, moreover, have shown that the presence of immigrants in labor markets is associated with increased job opportunities overall, including job opportunities for native-born minority groups.

Some studies of the effects of immigration on wage levels have revealed evidence of adverse wage effects. For example, one study concluded that real wages were 8 to 10 percent lower on average in cities near the Mexican border. Several studies found a reduction in the wages of unskilled workers in areas with high concentrations of unskilled immigrant workers.

Other studies, however, have shown that greater concentrations of aliens in labor markets are associated with higher earnings of native-born workers. Increased wages have been found both for broad groups of workers and also for native-born minority groups with whom immigrants might compete directly for jobs.

The experience of the Los Angeles labor market in adjusting to a growing concentration of unskilled immigrant labor is instructive. One study estimated that more than a million foreign-born persons settled in Los Angeles County between 1970 and 1983. During the early 1980s the foreign-born in Los Angeles County represented close to a third of the total population. Job growth in the area was strong, and the new immigrants were quickly absorbed into the labor market. New immigrant workers accounted for some 70 percent of the net growth in employment in the 1970s. Job gains by native-born workers were predominantly in white-collar occupations, which expanded rapidly. Job growth among immigrants was concentrated mainly in unskilled jobs. Wage growth was lower than the national average for workers in manufacturing, particularly unskilled manufacturing jobs. In jobs outside manufacturing, however, including jobs in services and retail trade, wage growth was higher than the national average. This study also showed that the unemployment rate in Los Angeles, which had exceeded the national average in 1970, fell below the average by the early 1980s. These results were not, of course, the consequence of international migration alone, but they suggest a smooth labor market adjustment to the inflow of migrants.

Legal and Illegal Aliens

Although aliens who are eligible to hold jobs in the United States are clearly distinct from those who are not, researchers have not been able to isolate separate economic effects of illegal alien workers. Demographic differences between legal and illegal aliens may affect their patterns of labor market activity, but those differences appear to be small. Illegal aliens have a higher proportion of males than legal aliens, are younger, and are less likely to bring family members with them. Illegal migrants are likely to remain in the United States for shorter periods of time than legal migrants. Illegal migrants also tend to have lower levels of education and to work in jobs requiring lower skill levels. Illegal aliens may have less incentive to invest in schooling or other activities that are specifically useful in the U.S. labor market.

Legal and illegal aliens tend to settle in the same geographic areas, making it difficult to distinguish their separate labor market effects. Also, deportation risk notwithstanding, many illegal aliens have been living in the United States for a long time; it is estimated that a quarter have been U.S. residents for more than 10 years. The economic distinction between legal and illegal aliens is further blurred by the fact that many legal resident aliens were undocumented when they initially entered the United States, but later acquired legal status.

Labor Market Absorption of the Foreign-Born

Migrants have initial disadvantages in the labor market because many do not speak English, lack familiarity with national customs and institutions, and are not educated and trained for jobs in the United States. As they invest in education and develop skills, their labor market experiences and earnings can be expected to resemble those of the native-born.

Although the labor market success of immigrant groups depends on their skills and other characteristics, the evidence suggests that immigrant workers have been readily absorbed into the labor market. One dimension of the labor market adjustment of immigrants is their employment over the year. It has been estimated that on average the foreign-born catch up with the native-born in weeks worked in about 5 years; after 5 years there is no observed difference.

Census and other data show that, although the foreign-born initially earn less than the native-born, like the native-born their earnings rise with increased schooling and with U.S. labor market experience. Some results suggest that after 10 to 20 years, the earnings of foreign-born males equal and then exceed the earnings of native-born males with similar characteristics. This implies that the disadvantages of foreign origin diminish, while the favorable effects of self-selection and motivation remain. Apparently migrants work hard to capture the benefits of their investment in coming to the United States.

Many immigrants are entrepreneurs. One study found that foreign-born males are significantly more likely to be self-employed than native-born males with similar skills. Self-employed workers, both foreign- and native-born, had higher annual incomes than salaried workers. Returns on capital owned by self-employed workers may partially explain these differences in incomes. Self-employment also provides greater potential for high work effort. The self-employed work more hours per week than do wage-and-salary workers.

Refugees may not adjust to the U.S. labor market as rapidly as other migrants. Because economic factors are not the primary determinants of their migration, refugees are likely to have fewer of the characteristics associated with high labor market performance. Some refugees, however, may bring substantial amounts of physical as well as human capital. Also, because refugees may not be able to return to their country of origin, they may have greater incentives than other immigrants to adapt rapidly to the U.S. labor market. Limited evidence, based on the experience of Cuban refugees in the early 1960s, suggests that the earnings of political refugees approach, but do not overtake, those of comparable native-born workers.

The children of the foreign-born have better-than-average success in the labor market. Earnings of children of the foreign-born are about 5 percent higher than earnings of children of native-born parents with similar characteristics. Any disadvantages to the second generation that may arise from being raised in a home less familiar with the language and customs of the United States are apparently outweighed by the advantages of having parents who are foreign-born. One study of the children of foreign-born parents found that they have higher investments in schooling than do children of comparable native-born Americans, and also better reported health status.

One study of illegal aliens found that their labor market adjustment patterns were similar to those for legal immigrants. Earnings rose with years of schooling and labor market experience in the country of origin, but especially with U.S. labor market experience.

A recent study of apprehended illegal aliens in Chicago showed that they use market opportunities to improve their economic status. The subjects of the study were able to benefit from a competitive labor market, with opportunities for skill improvement and upward job mobility. These illegal aliens were apparently able to work their way up from entry-level jobs. Only 16 percent of those in the Chicago study had wage rates below the Federal minimum of $3.35 per hour, and some of these were in sectors not covered by the minimum wage. The average hourly wage of these illegal aliens at the time of their apprehension, in 1983, was $4.50. The INS reports that in fiscal 1985, 14 percent of apprehended illegal aliens who had jobs received wages below the Federal minimum.

One reason for the successful absorption of immigrants into the U.S. labor market is that overall migrant inflows have been low relative to the size of the population, to labor force growth, and to domestic migration. International migrant flows, moreover, historically respond to labor market demands. Before legal restrictions were imposed, immigration increased when the demand for labor was relatively high and decreased when labor demand was relatively low. During the Great Depression, for instance, immigration to the United States dropped sharply and return migration increased. In recent years, numerical restrictions have resulted in queues of potential immigrants waiting for visas and, as a result, have limited the response of legal migration inflows to U.S. labor market conditions. Illegal migrant flows may be more responsive to economic conditions, but are not precisely measurable on an annual basis. Still, migrant flows appear to respond to labor market demands.

Perhaps most important for the absorption of immigrant labor is the strength and flexibility of the U.S. labor market. Workers and employers are generally free to respond to market signals, and to negotiate wages and other terms of employment either directly or through the collective bargaining process. The absence of significant barriers to change and growth has enabled the U.S. labor market to adjust easily to immigrant flows, as well as to other changes in the labor force and the economy.

Over the past several decades, the United States has generated tens of millions of new jobs as it accommodated a substantial influx of new workers. The vast majority of that influx stemmed from the baby-boom generation reaching working age, coupled with sharply increased labor force participation by women. Roughly 33 million more people were employed in 1980 than in 1960, an increase of about 50 percent. Over the same period, 2 million more foreign-born were employed, or 6 percent of the total increase in U.S. employment. Even allowing for an increased number of employed illegal aliens over the period, however, these figures suggest that immigration has been a relatively small factor in long-term employment growth and in the adjustment of the economy to changing conditions.

IMMIGRATION AND TRADE

The countries of the world are economically linked by the exchange of people, goods, and capital. Both parties gain from trade and, in the absence of restrictions, exchange will continue until potential benefits are exhausted. The movement of labor across borders can be a partial substitute for the movement of goods and capital. When international trade in goods or capital flows is hindered, pressures are heightened for people to migrate instead.

Countries that are relatively well-endowed with natural resources but thinly populated will tend to export products that have a relatively high natural resource content but relatively low labor content. Such countries will tend to import products that require relatively greater inputs of labor. Developing countries, similarly, would have a comparative advantage in producing and exporting products that embody relatively high proportions of low-skilled labor and less capital than would be the case for U.S. production and exports.

Restrictions on trade between developing countries and the United States provide powerful incentives for the migration of low-skilled workers into the United States. The presence of these additional workers in the United States enables domestic business enterprises to produce goods profitably that would not otherwise have been produced here. In the absence of trade restrictions, such goods might have been imported. In the presence of both trade restrictions and effective restrictions on immigration, however, such goods may be available to American consumers only at higher prices.

The production of certain fresh fruits and vegetables in the United States is a frequently cited example of an industry that draws heavily on low-skilled alien labor. Many alien workers are seasonally employed to pick perishable crops. About 15,000 to 20,000 are legally admitted each year, subject to Department of Labor certification. This certification is contingent on a job offer and on a labor market test. Certification is granted if it is determined that qualified workers are not available in the United States and that the wages and working conditions of the job will not adversely affect similarly employed U.S. workers.

The largest alien work force in agriculture, however, appears to consist of undocumented workers who come primarily from countries in the Western Hemisphere. The inflow of low-skilled alien workers to pick U.S. crops has a long history. The bracero program allowed U.S. employers to recruit large numbers of temporary workers from Mexico. The bracero program was begun during World War II to alleviate the labor shortage when rural workers left the farms for the higher wages of urban factory jobs. In its peak years, during the late 1950s, more than 400,000 such short-term work permits were issued annually. The program was terminated officially in 1964, but many migrant workers from Mexico still come to the United States without legal sanction.

Although many aliens work on farms illegally, the availability of such workers may enable U.S. production of certain fruit and vegetable crops to remain competitive with that of other nations. The argument is sometimes made, however, that alien labor benefits agricultural producers only in the short run, and that it delays shifts toward mechanization that are necessary to maintain long-run competitiveness with foreign producers. Although restricting the supply of alien farm labor would encourage the substitution of machinery for human labor, it would increase the costs of farm production. Capital-intensive production methods are not inherently more cost-effective than labor-intensive methods. Steps that would induce scarcity by reducing the supply of labor to an industry raise costs and prices and reduce output and growth. A policy of restricting international migration to improve the long-run competitiveness of the United States would have the opposite effect.

FISCAL EFFECTS OF IMMIGRATION

A major concern regarding immigration is the use of public services such as education and low-income assistance by aliens. If international migrants use services that cost more than the taxes they pay, they are a fiscal burden on native-born Americans. If their tax payments exceed the cost of services, however, immigrants are a net fiscal gain for the country. Both the tax payments and the services used are spread over the years after an immigrant first arrives in the United States. Consequently, any assessment of the fiscal effects of immigration must consider whether the present value of tax payments exceeds that of service costs, measured over the years the immigrant is in the United States.

As with native-born Americans, an immigrant's use of public services and the ability to pay for those services through taxation depend on personal and family characteristics and, crucially, on success in the labor market. People in their twenties and thirties and in good health—both the native-born and immigrants—are more likely to be working and paying taxes, and less likely to be dependent on government assistance, than are children, the elderly, or the disabled. Immigrants are typically adults arriving near the start of their working lives. Thus, immigrants, on average, are better able to support themselves through work than is the native-born population, which has a higher proportion of dependents.

A great deal of variation can be observed in the labor market success and consequently the fiscal burden of immigrant groups. As immigrants adjust to their new environment and as their families grow, their demand for public education and other services—and their ability to pay for those services—increases. As with the native-born population, when immigrants age and their children mature, their reliance on government retirement benefits grows but is offset by the entry of their children into the labor market.

PUBLIC SERVICES USED

International migrants, like the native-born, may use three major types of public programs: low-income assistance, social insurance, and education and health. These programs provide benefits directly to recipients. Other public services, such as fire and police protection, that provide general benefit to the community may also have greater demands placed on them by the presence of greater numbers of people. In addition, the presence of immigrants in the United States entails a more intensive use of the country's publicly financed infrastructure—its transportation system, recreational areas, and other facilities.

Eligibility for Services

Legal immigrants to the United States are eligible for most benefits available to citizens. Aliens admitted temporarily and illegal aliens are in many cases ineligible for such benefits.

The major low-income assistance programs funded by the Federal Government, usually in conjunction with State funding, generally restrict eligibility to aliens who permanently and lawfully reside in the United States. These include aid to families of dependent children, food stamps, medicaid, supplemental security income, and housing assistance. What constitutes sufficient legal standing for benefits varies with each program; regulations list specific conditions under which aliens may participate. Some recent court rulings require that benefits under supplementary security income and other programs be made available to certain aliens who may be in the United States illegally.

Eligibility for benefits under social security and medicare depends on worker and employer contributions to the programs, and not on immigration status. Social security recipients may reside outside the United States, although nonresidents receive less than 1 percent of total benefits. Unemployment compensation is generally restricted to lawful permanent residents of the United States who qualify through their previous work experience.

Local public health facilities normally serve patients without regard to their immigration status; elective treatment in public health facilities is usually limited to persons who are able to pay for services. Public education at the elementary and secondary levels is also available to all residents regardless of immigration status. Legal precedent was established in 1982 by the Supreme Court, which held that Texas could not deny free public education to undocumented alien children. Even prior to this decision, however, most States did not check the legal status of school children or their parents. Moreover, many children of illegal aliens are born in the United States and consequently are citizens eligible for education services without qualification.

Financial aid for higher education and training programs under the Job Training Partnership Act are largely restricted to lawful permanent residents and refugees. The Federal Government funds bilingual education programs that are of use to immigrants, and it also funds a refugee assistance program.

Benefits Received

Little is known about the use of government services by immigrants. Most available studies examine disparate immigrant groups in various time periods, often focusing on immigrants living in particular locations in the country. The evidence that exists, however, suggests that immigrants are not heavy users of public services. Illegal residents are less likely to avail themselves of government programs than are legal immigrants, but the determining factor in service use is not immigration status. The major reasons why illegal residents may receive lower benefits than others is that they are younger and have fewer dependents, which reduces their eligibility for programs.

A recent study shows that some groups of immigrants, such as Asians and Hispanics, have higher participation rates in welfare programs than do their ethnic counterparts born in the United States. Other groups of immigrants, however, use welfare less than the native-born. For Asian immigrants, higher participation is due partly to the relocation assistance offered to political refugees from South-east Asia in the 1970s. Immigrant groups other than Asians rely on public assistance less than do the native-born with similar incomes.

A study of Mexican migrants in Los Angeles focuses on State and local public services. This study, which includes both legal and illegal residents, finds that these families have more children and thus place greater demands on public schools and health facilities than does the average family. The Mexican immigrant households in this study do not appear to make disproportionate use of other services.

Direct evidence on public service use by deportable aliens is sketchy. Deportable aliens are generally ineligible for Federal and many local benefit programs, but the extent to which they are actually screened out is unknown. The INS is developing a project called SAVE (Systematic Alien Verification for Entitlements), which gives State and local government agencies access to an automated data system to verify the eligibility of alien applicants for selected programs. The INS also provides data on immigration status to many programs and areas through other channels.

Systematic screening is most cost-effective in areas where the concentration of illegal aliens is high. California has one of the oldest alien verification programs in the country, having routinely screened alien applicants for social services for about 10 years. In 1984, almost 30,000 persons or 3 percent of all applicants were denied welfare benefits in Los Angeles because of immigration status. The figure understates the full impact of this program, however, because it excludes ineligible aliens who were deterred from applying by the knowledge that their immigrant status would be checked.

Several studies suggest that illegal aliens use below-average amounts of welfare and other social services. This may be due not only to their demographic characteristics, but also to a fear of detection by authorities and to heightened efforts by some government agencies to limit access to those eligible. In addition, extended family networks may provide a partial means of support in emergencies. It is likely that illegal aliens use public education and health facilities more than welfare and other services because of easier access. This imposes a direct fiscal burden on State and local governments, which provide most of the funding for public schools; local governments also provide funding for local hospitals.

A 1976 study of apprehended illegal workers found that their use of government benefits was very low, reflecting the fact that they were typically young, male, and single. Studies of illegal migrants with longer stays in the country tend to show higher rates of participation in social programs. A recent study of illegal residents in Texas found very little use of social and other welfare services, but substantial use of health and education services. Illegal aliens appear to use health services more frequently than other services, but most appear to pay for those services.

The stream of benefits received by immigrants over their lifetimes has not been directly surveyed. One study suggests that the benefits received by legal (and some illegal) migrants are initially well below those of the average native-born family. During their first 5 years in the United States, immigrants receive similar welfare and education benefits but lower social security payments. As immigrants remain longer in the country, they receive more education and social insurance benefits. The study estimates that overall use of benefits among immigrants equals the average usage by native-born families only after 15 years of residence.

TAXES PAID

All residents of the United States, regardless of legal status, are required to pay taxes. Employed migrants in most cases are subject to Federal and State income tax withholding and social security taxes. They also pay sales and property taxes.

The extent of tax payments by illegal aliens has been the subject of much debate and analysis. Sales taxes and property taxes, important sources of local revenue, are collected from illegal aliens without substantial avoidance directly at the point of sale or implicitly as part of a rent payment. Social security taxes are automatically deducted from paychecks and may not be avoided easily by illegal aliens, although some employers may fail to make the required payment to the Federal Government. The amount withheld for income taxes may be substantially reduced, however, if an illegal alien claims a large number of exemptions. False exemption claims are difficult to prevent and, according to some accounts, income tax avoidance may be pervasive among illegal aliens. The extent of such tax evasion, however, is not clear.

A study of illegal migrants in Texas found that the vast majority made substantial payments for Federal income and social security taxes, as well as sales and excise taxes. The study did not estimate property taxes, and Texas had no State income tax. A study of Mexican migrants, both legal and illegal, in Los Angeles found that migrants paid below-average State and local taxes (including property taxes), reflecting their below-average levels of income.

These studies reflect tax payments in a single year and reveal little about the lifetime flow of immigrants' tax payments. No survey directly measures the lifetime pattern of tax payments by immigrants. One cross-sectional analysis roughly estimates that the total tax payments of immigrants are below those of the average native-born family only during the first few years after entry. With rising family incomes in subsequent years, immigrants' tax payments rise. Taxes paid by immigrants are estimated to be higher after 10 years in this country, on average, than taxes paid by the native-born. The estimated differential continues to grow as the immigrants' length of stay in the United States increases.

NET FISCAL EFFECTS

Because of differences in their family characteristics and economic circumstances, immigrant groups may generate greatly varying net fiscal effects. Political refugees may have particular difficulties adjusting to life in a new land, and they benefit from special refugee assistance programs. Those who arrive without basic educational and job skills may find initial problems in the labor market, but the evidence shows that they are able eventually to increase their earnings and reduce their program dependency. Illegal aliens may find it possible to evade some taxes, but they use fewer public services (especially social security benefits) than do other groups.

On the whole, however, international migrants appear to pay their own way from a public finance standpoint. Most come to the United States to work, and government benefits do not appear to be a major attraction. Some immigrants arrive with fairly high educational levels, and their training imposes no substantial costs on the public. Their rising levels of income produce a rising stream of tax payments to all levels of government. Their initial dependence on welfare benefits is usually limited, and they finance their participation in social security retirement benefits with years of contributions.

The distribution of these net fiscal benefits is not uniform. Many of the fiscal costs of migration, such as those arising from pressures on school systems and hospitals, are incurred in areas where there is a high concentration of migrants. Tax collections from migrants in these areas may not fully cover these additional costs. An increase in population, however, generally imposes a fiscal burden on local areas, which is offset by increased local fiscal capacity.

There may also be fiscal spillovers of immigration to other workers. For example, those who face stronger labor market competition may experience a reduction in annual earnings and a corresponding increased reliance on government benefit programs, such as unemployment compensation. Although some workers may be adversely affected, the extent of displacement appears to be small. The net spillover depends on the size of the offsetting reduction in benefit payments to (and increase in tax payments from) persons whose incomes have improved because of the positive economic effects of immigrants. The net fiscal spillover seems likely to be positive, with greater tax payments and lower benefit costs than would occur in the absence of immigration.

CONCLUSION

For much of the Nation's history, U.S. immigration policy has been based on the premise that immigrants have a favorable effect on the overall standard of living and on economic development. Analysis of the effects of recent migrant flows bears out this premise. Although an increasing number of migrants, including many illegal aliens, have entered the country in recent years, inflows are still low relative to population and relative to U.S. labor force growth.

International migrants have been readily absorbed into the labor market. Although some displacement may occur, it does not appear that migrants have displaced the native-born from jobs or have reduced wage levels on a broad scale. There is evidence that immigration has increased job opportunities and wage levels for other workers. Aliens may also provide a net fiscal benefit to the Nation, often paying more in taxes than they use in public services. Immigrants come to this country seeking a better life, and their personal investments and hard work provide economic benefits to themselves and to the country as a whole.

The economic gains provided by international migration, however, do not justify the presence or employment of aliens in the United States on an illegal basis. Illegal aliens knowingly defy American laws while their presence establishes claims to economic opportunity and Constitutional protections. As a sovereign Nation, the United States must responsibly decide not only who may cross its borders, but also who may stay.

Appendix A

REPORT TO THE PRESIDENT ON THE ACTIVITIES OF THE COUNCIL OF ECONOMIC ADVISERS DURING 1985

LETTER OF TRANSMITTAL

COUNCIL OF ECONOMIC ADVISERS,
Washington, D.C., December 31, 1985.

MR. PRESIDENT:

The Council of Economic Advisers submits this report on its activities during the calendar year 1985 in accordance with the requirements of the Congress, as set forth in section 10(d) of the Employment Act of 1946 as amended by the Full Employment and Balanced Growth Act of 1978.

Sincerely,

BERYL W. SPRINKEL, *Chairman*
THOMAS GALE MOORE, *Member*

Council Members and their Dates of Service

Name	Position	Oath of office date	Separation date
Edwin G. Nourse	Chairman	August 9, 1946	November 1, 1949.
Leon H. Keyserling	Vice Chairman	August 9, 1946	
	Acting Chairman	November 2, 1949	
	Chairman	May 10, 1950	January 20, 1953.
John D. Clark	Member	August 9, 1946	
	Vice Chairman	May 10, 1950	February 11, 1953.
Roy Blough	Member	June 29, 1950	August 20, 1952.
Robert C. Turner	Member	September 8, 1952	January 20, 1953.
Arthur F. Burns	Chairman	March 19, 1953	December 1, 1956.
Neil H. Jacoby	Member	September 15, 1953	February 9, 1955.
Walter W. Stewart	Member	December 2, 1953	April 29, 1955.
Raymond J. Saulnier	Member	April 4, 1955	
	Chairman	December 3, 1956	January 20, 1961.
Joseph S. Davis	Member	May 2, 1955	October 31, 1958.
Paul W. McCracken	Member	December 3, 1956	January 31, 1959.
Karl Brandt	Member	November 1, 1958	January 20, 1961.
Henry C. Wallich	Member	May 7, 1959	January 20, 1961.
Walter W. Heller	Chairman	January 29, 1961	November 15, 1964.
James Tobin	Member	January 29, 1961	July 31, 1962.
Kermit Gordon	Member	January 29, 1961	December 27, 1962.
Gardner Ackley	Member	August 3, 1962	
	Chairman	November 16, 1964	February 15, 1968.
John P. Lewis	Member	May 17, 1963	August 31, 1964.
Otto Eckstein	Member	September 2, 1964	February 1, 1966.
Arthur M. Okun	Member	November 16, 1964	
	Chairman	February 15, 1968	January 20, 1969.
James S. Duesenberry	Member	February 2, 1966	June 30, 1968.
Merton J. Peck	Member	February 15, 1968	January 20, 1969.
Warren L. Smith	Member	July 1, 1968	January 20, 1969.
Paul W. McCracken	Chairman	February 4, 1969	December 31, 1971.
Hendrik S. Houthakker	Member	February 4, 1969	July 15, 1971.
Herbert Stein	Member	February 4, 1969	
	Chairman	January 1, 1972	August 31, 1974.
Ezra Solomon	Member	September 9, 1971	March 26, 1973.
Marina v.N. Whitman	Member	March 13, 1972	August 15, 1973.
Gary L. Seevers	Member	July 23, 1973	April 15, 1975.
William J. Fellner	Member	October 31, 1973	February 25, 1975.
Alan Greenspan	Chairman	September 4, 1974	January 20, 1977.
Paul W. MacAvoy	Member	June 13, 1975	November 15, 1976.
Burton G. Malkiel	Member	July 22, 1975	January 20, 1977.
Charles L. Schultze	Chairman	January 22, 1977	January 20, 1981.
William D. Nordhaus	Member	March 18, 1977	February 4, 1979.
Lyle E. Gramley	Member	March 18, 1977	May 27, 1980.
George C. Eads	Member	June 6, 1979	January 20, 1981.
Stephen M. Goldfeld	Member	August 20, 1980	January 20, 1981.
Murray L. Weidenbaum	Chairman	February 27, 1981	August 25, 1982.
Jerry L. Jordan	Member	July 14, 1981	July 31, 1982.
William A. Niskanen	Member	June 12, 1981	March 30, 1985.
Martin Feldstein	Chairman	October 14, 1982	July 10, 1984.
William Poole	Member	December 10, 1982	January 20, 1985.
Beryl W. Sprinkel	Chairman	April 18, 1985	
Thomas Gale Moore	Member	July 1, 1985	

Report to the President on the Activities of the Council of Economic Advisers During 1985

The Council of Economic Advisers was established by the Employment Act of 1946 to provide economic analysis and advice to the President and thus to assist in the development and implementation of national economic policies. The Council also advises the President on other matters affecting the health and operations of the Nation's economy.

Beryl W. Sprinkel was appointed Chairman of the Council on April 18, 1985. Dr. Sprinkel was formerly Under Secretary of the Treasury for Monetary Affairs. Thomas Gale Moore of the Hoover Institution on War, Revolution, and Peace of Stanford University was appointed a Member on July 1, 1985. William A. Niskanen resigned as a Member on March 30, 1985, to become Chairman of The Cato Institute in Washington, D.C. William Poole resigned as a Member on January 20, 1985, to return to Brown University where he is a Professor of Business Administration.

MACROECONOMIC POLICIES

As is its tradition, the Council devoted much of its time during 1985 to advising the President on the formulation of broad economic policy objectives and the design of programs to carry them out.

The Council chaired an interagency forecasting group, also including the Secretary of the Treasury and the Director of the Office of Management and Budget, which develops the economic projections for the Federal budget that are presented to the President. The Council also presented studies of macroeconomic policy issues before the Cabinet-level Economic Policy Council, paying particular attention to monetary policy and financial market developments.

The Chairman of the Council was elected Chairman of the Economic Policy Committee of the Organization for Economic Cooperation and Development (OECD) and the Council participated actively in other OECD fora, working on a variety of issues, including structural adjustment and barriers to economic development.

MICROECONOMIC POLICIES

A wide variety of microeconomic issues received Council attention during the year. The Council participated in Cabinet-level groups dealing with such issues as international trade policy and regulation, agriculture and farm credit, privatization and alternatives to Federal regulation, employee pensions, space shuttle pricing, immigration, antitrust laws, the economic impact of the Gramm-Rudman-Hollings budget proposals, and analysis of the effects of tax reform.

PUBLIC INFORMATION

The Council's *Annual Report* is the principal medium through which the Council informs the public of its work and its views. It is also an important vehicle for presenting the Administration's domestic and international economic policies. Annual distribution of the *Report* in recent years has averaged about 50,000 copies. The Council also assumes primary responsibility for the monthly *Economic Indicators*, which is issued by the Joint Economic Committee of the Congress and has a distribution of approximately 10,000. Information is also provided to the public through speeches and other public appearances by the Council Chairman, Members, and senior staff.

ORGANIZATION AND STAFF OF THE COUNCIL

OFFICE OF THE CHAIRMAN

The Chairman is responsible for communicating the Council's views to the President. This role is performed through personal discussions with the President and written reports on economic developments. The Chairman also represents the Council at Cabinet meetings, meetings of the Cabinet-level Economic Policy Council and Domestic Policy Council, the daily White House senior staff meetings, and at many other formal and informal meetings of senior government officials. The Chairman exercises ultimate responsibility for directing the work of the professional staff.

COUNCIL MEMBERS

Members of the Council are involved in the full range of issues within the Council's purview, and are responsible for the supervision of the work of the professional staff. Members represent the Council at a wide variety of interagency and international meetings and assume major responsibility for selecting issues for Council attention.

The small size of the Council permits the Council Chairman and Members to work as a team on most policy issues. There was in 1985, however, an informal division of subject matter. In addition to overseeing the entire work of the Council, Dr. Sprinkel has temporarily assumed primary responsibility for domestic and international macroeconomic analysis, economic projections, and monetary and financial issues. Dr. Moore has been primarily responsible for microeconomic, trade, and sectoral analysis, as well as regulatory issues.

PROFESSIONAL STAFF

The professional staff of the Council consists of the Special Assistant, the senior statistician, 11 senior staff economists, 6 junior staff economists, and 1 research assistant. The professional staff and their respective areas of concentration at the end of 1985 were:

Special Assistant to the Chairman

Margot E. Machol

Senior Staff Economists

Lincoln F. Anderson	Macroeconomics and Forecasting
Joseph R. Antos	Health, Education, and Welfare
Dallas S. Batten	International Finance and Macroeconomics
Robert G. Chambers	Agriculture
Arlene S. Holen	Labor and Immigration
Robert E. Keleher	Macroeconomics
Carol A. Leisenring	Macroeconomics and Monetary Policy
John H. Mutti	International Trade
Charles E. Stuart	Public Finance and Taxation
Susan E. Woodward	Financial Markets and Regulation
Martin B. Zimmerman	Energy, Transportation, Environment, and Regulation

Statistician

Catherine H. Furlong	Senior Statistician

Junior Staff Economists

David S. Bizer	Public Finance and Taxation
Catherine A. Bonser-Neal	International Trade and Finance
Phillip A. Braun	Macroeconomics and Finance
S. Dean Furbush	General Microeconomics and Labor
Ellen L. Hughes-Cromwick	Macroeconomics and Money
James V. Stout	General Microeconomics

Research Assistant

Anne H. Caple

Michael L. Mussa, William H. Abbott Professor of International Business at the University of Chicago, served as a consultant during 1985.

Natalie V. Rentfro, Linda A. Reilly, and Deborah D. Miller work in the Statistical Office, which is run by Mrs. Furlong. This office manages the Council's statistical information system, overseeing the publication of the *Economic Indicators* and the statistical appendix to the

Economic Report, as well as the verification of statistics in memoranda, testimony, and speeches.

Joseph Foote provided editorial assistance in the preparation of the *Economic Report*.

SUPPORTING STAFF

The Administrative Office, which provides general support for the Council's activities, consists of Elizabeth A. Kaminski, Staff Assistant to the Council, and Catherine Fibich, Administrative Assistant.

The secretaries for the Council of Economic Advisers during 1985 were Bonnie D. Brown, Andrea L. Carlson, Nancy L. Fiester, Bessie M. Lafakis, Lisa D. Robinson, Margaret L. Snyder, Suzanne M. Tucker, and Alice H. Williams.

John E. Singer (Lawrence College) served as an intern during the fall of 1985. Donald R. Brown, Tina L. Hoffman, and Penelope M. Lister provided assistance for the Council during the summer. Lorraine A. Ambrose served as a Student Assistant during the year.

DEPARTURES

The Council's senior staff economists, in most cases, are on leave of absence as professors from universities, or are from other government agencies or research institutions. Their tenure with the Council is generally limited to 1 or 2 years. Most of the senior staff economists who resigned during the year returned to their previous affiliations. They are J. Bradley Bond (Department of Commerce), Roger D. Feldman (University of Minnesota), Richard T. Freeman (Board of Governors of the Federal Reserve System), Marvin S. Goodfriend (Federal Reserve Bank of Richmond), Joel B. Slemrod (University of Minnesota), and Joe A. Stone (University of Oregon). Some others went on to new positions. They are Joseph A. Grundfest (Commissioner, Securities and Exchange Commission), William S. Haraf (Visiting Scholar, American Enterprise Institute), Randall S. Jones (Vice President, Japan Economic Institute of America), Robert L. Thompson (Assistant Secretary, Department of Agriculture), Kathleen P. Utgoff (Executive Director, Pension Benefit Guaranty Corporation), and Robert S. Villanueva (consultant).

Junior staff economists usually are graduate students who spend 1 year with the Council and then return to complete their dissertations. Those who resigned in 1985 were Alexander S. Berg (University of Chicago), Ann Marie Hillberg (Purdue University), Andrew N. Kleit (Yale University), Mark S. Lutz (University of Maryland), John F. Navratil (Harvard University), and Thomas R. Rumbaugh (University of Maryland).

Support staff who resigned in 1985 were Patricia A. Lee (Department of Commerce), Rosemary M. Rogers (Pension Benefit Guaranty Corporation), and Barbara L. Severn (Department of the Navy).

Appendix B

STATISTICAL TABLES RELATING TO INCOME, EMPLOYMENT, AND PRODUCTION

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General Notes

Detail in these tables may not add to totals because of rounding.

Unless otherwise noted, all dollar figures are in current dollars.

Symbols used:

^{p}Preliminary.

- - Not available (also, not applicable).

Note.—Data for the national income and product accounts series appearing in this appendix reflect the comprehensive revision by the Department of Commerce, Bureau of Economic Analysis. See *Survey of Current Business* for details.

TABLE B–1.—*Gross national product, 1929–85*

[Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross national product	Personal consumption expenditures				Gross private domestic investment						
							Fixed investment					
								Nonresidential				
		Total	Durable goods	Nondurable goods	Services	Total	Total	Total	Structures	Producers' durable equipment	Residential	Change in business inventories
1929	103.9	77.3	9.2	37.7	30.4	16.7	14.9	11.0	5.5	5.5	4.0	1.7
1933	56.0	45.8	3.5	22.3	20.1	1.6	3.1	2.5	1.1	1.4	.6	−1.6
1939	91.3	67.0	6.7	35.1	25.2	9.5	9.1	6.1	2.2	3.9	3.0	.4
1940	100.4	71.0	7.8	37.0	26.2	13.4	11.2	7.7	2.6	5.2	3.5	2.2
1941	125.5	80.8	9.7	42.9	28.3	18.3	13.8	9.7	3.3	6.4	4.1	4.5
1942	159.0	88.6	6.9	50.8	31.0	10.3	8.5	6.3	2.2	4.1	2.2	1.8
1943	192.7	99.5	6.5	58.6	34.3	6.2	6.9	5.4	1.8	3.7	1.4	−.6
1944	211.4	108.2	6.7	64.3	37.2	7.7	8.7	7.4	2.4	5.0	1.4	−1.0
1945	213.4	119.6	8.0	71.9	39.7	11.3	12.3	10.6	3.3	7.3	1.7	−1.0
1946	212.4	143.9	15.8	82.7	45.4	31.5	25.1	17.3	7.4	9.9	7.8	6.4
1947	235.2	161.9	20.4	90.9	50.6	35.0	35.5	23.5	8.1	15.3	12.1	−.5
1948	261.6	174.9	22.9	96.6	55.5	47.1	42.4	26.8	9.5	17.3	15.6	4.7
1949	260.4	178.3	25.0	94.9	58.4	36.5	39.5	24.9	9.2	15.7	14.6	−3.1
1950	288.3	192.1	30.8	98.2	63.2	55.1	48.3	27.8	10.0	17.8	20.5	6.8
1951	333.4	208.1	29.9	109.2	69.0	60.5	50.2	31.8	11.9	19.9	18.4	10.2
1952	351.6	219.1	29.3	114.7	75.1	53.5	50.5	31.9	12.2	19.7	18.6	3.1
1953	371.6	232.6	32.7	117.8	82.1	54.9	54.5	35.1	13.6	21.5	19.4	.4
1954	372.5	239.8	32.1	119.7	88.0	54.1	55.7	34.7	13.9	20.8	21.1	−1.6
1955	405.9	257.9	38.9	124.7	94.3	69.7	64.0	39.0	15.2	23.9	25.0	5.7
1956	428.2	270.6	38.2	130.8	101.6	72.7	68.0	44.5	18.2	26.3	23.5	4.6
1957	451.0	285.3	39.7	137.1	108.5	71.1	69.7	47.5	18.9	28.6	22.2	1.4
1958	456.8	294.6	37.2	141.7	115.7	63.6	65.1	42.4	17.5	24.9	22.7	−1.5
1959	495.8	316.3	42.8	148.5	125.0	80.2	74.4	46.3	18.0	28.3	28.1	5.8
1960	515.3	330.7	43.5	153.2	134.0	78.2	75.1	48.8	19.2	29.7	26.3	3.1
1961	533.8	341.1	41.9	157.4	141.8	77.1	74.7	48.3	19.4	28.9	26.4	2.4
1962	574.6	361.9	47.0	163.8	151.1	87.6	81.5	52.5	20.5	32.1	29.0	6.1
1963	606.9	381.7	51.8	169.4	160.6	93.1	87.3	55.2	20.8	34.4	32.1	5.8
1964	649.8	409.3	56.8	179.7	172.8	99.6	94.2	61.4	22.7	38.7	32.8	5.4
1965	705.1	440.7	63.5	191.9	185.4	116.2	106.2	73.1	27.4	45.8	33.1	9.9
1966	772.0	477.3	68.5	208.5	200.3	128.6	114.4	83.5	30.5	53.0	30.9	14.2
1967	816.4	503.6	70.6	216.9	216.0	125.7	115.4	84.4	30.7	53.7	31.1	10.3
1968	892.7	552.5	81.0	235.0	236.4	137.0	129.1	91.4	32.9	58.5	37.7	7.9
1969	963.9	597.9	86.2	252.2	259.4	153.2	143.4	102.3	37.1	65.2	41.2	9.8
1970	1,015.5	640.0	85.7	270.3	284.0	148.8	145.7	105.2	39.2	66.1	40.5	3.1
1971	1,102.7	691.6	97.6	283.3	310.7	172.5	164.7	109.6	40.9	68.7	55.1	7.8
1972	1,212.8	757.6	111.2	305.1	341.3	202.0	191.5	123.0	44.5	78.5	68.6	10.5
1973	1,359.3	837.2	124.7	339.6	373.0	238.8	219.2	145.9	51.4	94.5	73.3	19.6
1974	1,472.8	916.5	123.8	380.9	411.9	240.8	225.4	160.6	57.0	103.6	64.8	15.4
1975	1,598.4	1,012.8	135.4	416.2	461.2	219.6	225.2	162.9	56.3	106.6	62.3	−5.6
1976	1,782.8	1,129.3	161.5	452.0	515.9	277.7	261.7	180.0	60.1	119.9	81.7	16.0
1977	1,990.5	1,257.2	184.5	490.4	582.3	344.1	322.8	214.2	66.7	147.4	108.6	21.3
1978	2,249.7	1,403.5	205.6	541.8	656.1	416.8	388.2	259.0	81.0	178.0	129.2	28.6
1979	2,508.2	1,566.8	219.0	613.2	734.6	454.8	441.9	302.8	99.5	203.3	139.1	13.0
1980	2,732.0	1,732.6	219.3	681.4	831.9	437.0	445.3	322.8	113.9	208.9	122.5	−8.3
1981	3,052.6	1,915.1	239.9	740.6	934.7	515.5	491.5	369.2	138.5	230.7	122.3	24.0
1982	3,166.0	2,050.7	252.7	771.0	1,027.0	447.3	471.8	366.7	143.3	223.4	105.1	−24.5
1983	3,401.6	2,229.3	289.6	817.0	1,122.7	501.9	508.3	356.3	126.1	230.2	152.0	−6.4
1984	3,774.7	2,423.0	331.1	872.4	1,219.6	674.0	607.0	427.9	147.6	280.2	179.1	67.1
1985[p]	3,992.5	2,581.9	360.8	912.5	1,308.6	670.4	661.4	475.7	170.0	305.8	185.6	9.1
1982: I	3,112.6	1,996.3	245.1	758.1	993.1	459.5	483.6	382.0	150.3	231.7	101.7	−24.1
II	3,159.5	2,023.8	248.9	762.6	1,012.2	467.8	472.9	369.2	145.1	224.1	103.6	−5.0
III	3,179.4	2,065.6	252.8	776.7	1,036.1	452.2	461.2	360.7	140.2	220.5	100.5	−9.0
IV	3,212.5	2,117.0	263.8	786.6	1,066.5	409.6	469.5	354.9	137.6	217.3	114.7	−59.9
1983: I	3,268.7	2,146.0	268.5	792.4	1,085.2	425.0	467.7	338.0	127.6	210.4	129.7	−42.7
II	3,365.1	2,210.1	285.3	811.7	1,113.0	483.7	489.2	343.0	121.5	221.5	146.2	−5.5
III	3,437.5	2,254.9	295.3	826.5	1,133.1	521.2	524.0	357.3	124.7	232.6	166.7	−2.8
IV	3,535.0	2,306.3	309.4	837.2	1,159.6	577.6	552.1	386.8	130.5	256.3	165.4	25.5
1984: I	3,676.5	2,358.6	321.6	856.6	1,180.4	658.8	566.7	394.1	135.0	259.1	172.6	92.1
II	3,757.5	2,414.4	330.2	873.2	1,211.1	673.3	604.5	423.4	147.0	276.5	181.0	68.9
III	3,812.2	2,439.0	331.1	876.6	1,231.3	687.9	619.5	435.9	151.3	284.5	183.7	68.3
IV	3,852.5	2,480.1	341.5	883.1	1,255.4	676.2	637.2	458.1	157.2	300.9	179.1	39.0
1985: I	3,917.5	2,525.0	351.5	895.7	1,277.8	657.6	639.1	459.6	166.1	293.5	179.4	18.5
II	3,960.6	2,563.3	356.5	910.2	1,296.6	672.8	657.3	474.2	169.7	304.5	183.1	15.5
III	4,016.9	2,606.1	376.0	914.5	1,315.6	666.1	665.9	478.5	170.4	308.1	187.4	.2
IV[p]	4,075.1	2,633.3	359.2	929.4	1,344.6	685.2	683.2	490.6	173.7	316.9	192.5	2.1

See next page for continuation of table.

TABLE B–1.—*Gross national product, 1929–85*—Continued

[Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates]

Year or quarter	Net exports of goods and services			Government purchases of goods and services					Final sales	Percent change from preceding period	
					Federal						
	Net exports	Exports	Imports	Total	Total	National defense	Nondefense	State and local		Gross national product	Final sales
1929	1.1	7.1	5.9	8.9	1.5	....	....	7.4	102.2	....	....
1933	.4	2.4	2.1	8.3	2.2	....	....	6.1	57.6	−4.2	−5.5
1939	1.2	4.6	3.4	13.6	5.2	1.3	3.9	8.3	90.9	7.0	5.4
1940	1.8	5.4	3.7	14.2	6.1	2.3	3.9	8.1	98.3	10.0	8.1
1941	1.5	6.1	4.7	25.0	17.0	13.8	3.2	8.0	121.0	25.0	23.2
1942	.2	5.0	4.8	59.9	52.0	49.4	2.6	7.8	157.2	26.6	29.9
1943	−1.9	4.6	6.5	88.9	81.4	79.8	1.6	7.5	193.4	21.2	23.0
1944	−1.7	5.5	7.2	97.1	89.4	87.5	2.0	7.6	212.3	9.7	9.8
1945	−.5	7.4	7.9	83.0	74.8	73.7	1.1	8.2	214.4	.9	1.0
1946	7.8	15.2	7.3	29.1	19.2	16.4	2.8	9.9	206.0	−.5	−3.9
1947	11.9	20.3	8.3	26.4	13.6	10.0	3.6	12.8	235.7	10.8	14.4
1948	7.0	17.5	10.6	32.6	17.3	11.3	6.0	15.3	256.9	11.2	9.0
1949	6.5	16.4	9.8	39.0	21.1	13.9	7.2	18.0	263.4	−.5	2.5
1950	2.2	14.5	12.3	38.8	19.1	14.3	4.7	19.8	281.4	10.7	6.8
1951	4.5	19.8	15.3	60.4	38.6	33.8	4.8	21.8	323.2	15.7	14.8
1952	3.2	19.2	16.0	75.8	52.7	46.2	6.5	23.1	348.6	5.5	7.9
1953	1.3	18.1	16.8	82.8	57.9	49.0	8.9	24.8	371.1	5.7	6.5
1954	2.6	18.8	16.3	76.0	48.4	41.6	6.8	27.7	374.1	.2	.8
1955	3.0	21.1	18.1	75.3	44.9	39.0	6.0	30.3	400.2	9.0	7.0
1956	5.3	25.2	19.9	79.7	46.4	40.7	5.7	33.3	423.6	5.5	5.8
1957	7.3	28.2	20.9	87.3	50.5	44.6	5.9	36.9	449.6	5.3	6.1
1958	3.3	24.4	21.1	95.4	54.5	46.3	8.3	40.8	458.3	1.3	1.9
1959	1.5	25.0	23.5	97.9	54.6	46.4	8.2	43.3	490.0	8.5	6.9
1960	5.9	29.9	24.0	100.6	54.4	45.3	9.2	46.1	512.3	3.9	4.6
1961	7.2	31.1	23.9	108.4	58.2	47.9	10.2	50.2	531.4	3.6	3.7
1962	6.9	33.1	26.2	118.2	64.6	52.1	12.6	53.5	568.5	7.6	7.0
1963	8.2	35.7	27.5	123.8	65.7	51.5	14.2	58.1	601.1	5.6	5.7
1964	10.9	40.5	29.6	130.0	66.4	50.4	16.0	63.5	644.4	7.1	7.2
1965	9.7	42.9	33.2	138.6	68.7	51.0	17.7	69.9	695.2	8.5	7.9
1966	7.5	46.6	39.1	158.6	80.4	62.0	18.3	78.2	757.8	9.5	9.0
1967	7.4	49.5	42.1	179.7	92.7	73.4	19.3	87.0	806.1	5.8	6.4
1968	5.5	54.8	49.3	197.7	100.1	79.1	21.0	97.6	884.8	9.3	9.8
1969	5.6	60.4	54.7	207.3	100.0	78.9	21.1	107.2	954.1	8.0	7.8
1970	8.5	68.9	60.5	218.2	98.8	76.8	22.0	119.4	1,012.3	5.4	6.1
1971	6.3	72.4	66.1	232.4	99.8	74.1	25.8	132.5	1,094.9	8.6	8.2
1972	3.2	81.4	78.2	250.0	105.8	77.4	28.4	144.2	1,202.3	10.0	9.8
1973	16.8	114.1	97.3	266.5	106.4	77.5	28.9	160.1	1,339.7	12.1	11.4
1974	16.3	151.5	135.2	299.1	116.2	82.6	33.6	182.9	1,457.4	8.3	8.8
1975	31.1	161.3	130.3	335.0	129.2	89.6	39.6	205.9	1,604.1	8.5	10.1
1976	18.8	177.7	158.9	356.9	136.3	93.4	42.9	220.6	1,766.8	11.5	10.1
1977	1.9	191.6	189.7	387.3	151.1	100.9	50.3	236.2	1,969.2	11.7	11.5
1978	4.1	227.5	223.4	425.2	161.8	108.9	52.9	263.4	2,221.0	13.0	12.8
1979	18.8	291.2	272.5	467.8	178.0	121.9	56.1	289.9	2,495.2	11.5	12.3
1980	32.1	351.0	318.9	530.3	208.1	142.7	65.4	322.2	2,740.3	8.9	9.8
1981	33.9	382.8	348.9	588.1	242.2	167.5	74.8	345.9	3,028.6	11.7	10.5
1982	26.3	361.9	335.6	641.7	272.7	193.8	78.9	369.0	3,190.5	3.7	5.3
1983	−5.3	354.1	359.4	675.7	284.8	215.7	69.2	390.9	3,408.0	7.4	6.8
1984	−59.2	384.6	443.8	736.8	312.9	237.0	76.0	423.9	3,707.6	11.0	8.8
1985 p	−74.4	370.4	444.8	814.6	353.9	262.0	91.9	460.7	3,983.4	5.8	7.4
1982: I	34.7	373.0	338.4	622.1	262.9	182.2	80.7	359.2	3,136.7	−.2	4.2
II	42.1	378.9	336.8	625.7	259.3	190.3	69.0	366.4	3,164.5	6.2	3.6
III	14.5	359.9	345.4	647.1	275.3	197.3	78.0	371.8	3,188.4	2.5	3.1
IV	14.1	335.9	321.9	671.8	293.2	205.4	87.7	378.7	3,272.4	4.2	11.0
1983: I	28.4	344.6	316.2	669.3	287.1	209.4	77.8	382.2	3,311.4	7.2	4.9
II	−2.6	345.0	347.5	673.8	287.0	214.5	72.5	386.9	3,370.6	12.3	7.3
III	−19.7	358.0	377.6	681.1	286.0	215.8	70.2	395.1	3,440.3	8.9	8.5
IV	−27.4	368.8	396.2	678.6	279.2	222.9	56.2	399.4	3,509.5	11.8	8.3
1984: I	−37.4	375.4	412.8	696.5	285.6	228.3	57.3	410.9	3,584.4	17.0	8.8
II	−65.3	382.3	447.6	735.1	314.8	235.8	79.0	420.3	3,688.7	9.1	12.2
III	−61.9	391.4	453.3	747.3	318.5	236.2	82.2	428.8	3,743.9	6.0	6.1
IV	−72.2	389.5	461.7	768.4	332.9	247.5	85.4	435.5	3,813.5	4.3	7.6
1985: I	−42.3	379.6	421.9	777.2	334.4	249.5	84.9	442.8	3,899.0	6.9	9.3
II	−70.3	369.2	439.5	794.8	337.8	256.0	81.7	457.1	3,945.0	4.5	4.8
III	−87.8	363.2	451.0	832.5	364.8	269.9	95.0	467.7	4,016.7	5.8	7.5
IV p	−97.2	359.7	466.9	853.7	378.6	272.5	106.1	475.2	4,073.0	5.9	5.7

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-2.—*Gross national product in 1982 dollars, 1929–85*

[Billions of 1982 dollars, except as noted; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross national product	Personal consumption expenditures				Gross private domestic investment						
		Total	Durable goods	Nondurable goods	Services	Total	Fixed investment					Change in business inventories
							Total	Nonresidential			Residential	
								Total	Structures	Producers' durable equipment		
1929	709.6	471.4	40.3	211.4	219.7	139.2	128.4	93.0	54.7	38.4	35.4	10.8
1933	498.5	378.7	20.7	181.8	176.2	22.7	33.5	25.8	14.3	11.5	7.7	−10.7
1939	716.6	480.5	35.7	248.0	196.7	86.0	82.1	53.2	25.2	28.0	28.9	3.9
1940	772.9	502.6	40.6	259.4	202.7	111.8	97.4	65.0	28.5	36.5	32.5	14.4
1941	909.4	531.1	46.2	275.6	209.3	138.8	111.1	76.6	33.4	43.2	34.4	27.8
1942	1,080.3	527.6	31.3	279.1	217.2	76.7	64.7	47.4	20.9	26.5	17.3	12.0
1943	1,276.2	539.9	28.1	284.7	227.2	50.4	49.7	39.4	15.6	23.8	10.4	.7
1944	1,380.6	557.1	26.3	297.9	232.9	56.4	61.6	52.6	20.4	32.1	9.0	−5.2
1945	1,354.8	592.7	28.7	323.5	240.5	76.5	84.9	74.2	27.0	47.2	10.7	−8.4
1946	1,096.9	655.0	47.8	344.2	262.9	178.1	150.2	105.5	50.9	54.7	44.7	27.9
1947	1,066.7	666.6	56.5	337.4	272.6	177.9	178.9	121.7	47.5	74.2	57.2	−1.0
1948	1,108.7	681.8	61.7	338.7	281.4	208.2	196.0	127.4	50.5	76.9	68.6	12.3
1949	1,109.0	695.4	67.8	342.3	285.3	168.8	178.4	114.8	49.3	65.5	63.6	−9.7
1950	1,203.7	733.2	80.7	352.8	299.8	234.9	210.8	124.0	52.8	71.2	86.7	24.2
1951	1,328.2	748.7	74.7	362.9	311.1	235.2	204.3	131.7	56.5	75.2	72.6	30.8
1952	1,380.0	771.4	73.0	376.6	321.9	211.8	201.8	130.6	57.3	73.3	71.2	10.0
1953	1,435.3	802.5	80.2	388.2	334.1	216.6	213.8	140.1	62.3	77.7	73.8	2.8
1954	1,416.2	822.7	81.5	393.8	347.4	212.6	217.3	137.5	64.9	72.7	79.8	−4.8
1955	1,494.9	873.8	96.9	413.2	363.6	259.8	243.5	151.0	69.4	81.7	92.4	16.3
1956	1,525.6	899.8	92.8	426.9	380.1	257.8	244.9	160.4	75.5	84.9	84.4	12.9
1957	1,551.1	919.7	92.4	434.7	392.6	243.4	240.4	161.1	75.2	85.9	79.3	3.0
1958	1,539.2	932.9	86.9	439.9	406.1	221.4	224.8	143.9	70.6	73.3	81.0	−3.4
1959	1,629.1	979.4	96.9	455.8	426.7	270.3	253.8	153.6	71.9	81.7	100.2	16.5
1960	1,665.3	1,005.1	98.0	463.3	443.9	260.5	252.7	159.4	76.1	83.3	93.3	7.7
1961	1,708.7	1,025.2	93.6	470.1	461.4	259.1	251.8	158.2	77.7	80.5	93.6	7.3
1962	1,799.4	1,069.0	103.0	484.2	481.8	288.6	272.4	170.2	81.3	88.9	102.2	16.2
1963	1,873.3	1,108.4	111.8	494.3	502.3	307.1	290.5	176.6	81.6	95.1	113.9	16.6
1964	1,973.3	1,170.6	120.8	517.5	532.3	325.9	310.2	194.9	87.9	107.0	115.3	15.7
1965	2,087.6	1,236.4	134.6	543.2	558.5	367.0	341.8	227.6	101.8	125.8	114.2	25.2
1966	2,208.3	1,298.9	144.4	569.3	585.3	390.5	353.7	250.4	108.0	142.4	103.2	36.9
1967	2,271.4	1,337.7	146.2	579.2	612.3	374.4	345.6	245.0	105.4	139.6	100.6	28.8
1968	2,365.6	1,405.9	161.6	602.4	641.8	391.8	370.7	254.5	108.0	146.5	116.2	21.0
1969	2,423.3	1,456.7	167.8	617.2	671.7	410.3	385.1	269.7	112.9	156.9	115.4	25.1
1970	2,416.2	1,492.0	162.5	632.5	697.0	381.5	373.3	264.0	111.1	152.9	109.3	8.2
1971	2,484.8	1,538.8	178.3	640.3	720.2	419.3	399.7	258.4	107.3	151.0	141.3	19.6
1972	2,608.5	1,621.9	200.4	665.5	756.0	465.4	443.7	277.0	109.5	167.5	166.6	21.8
1973	2,744.1	1,689.6	220.3	683.7	786.1	520.8	480.8	317.3	117.7	199.6	163.4	40.0
1974	2,729.3	1,674.0	204.9	666.1	803.1	481.3	448.0	317.8	115.2	202.7	130.2	33.3
1975	2,695.0	1,711.9	205.6	676.5	829.8	383.3	396.1	281.2	102.8	178.4	114.9	−12.8
1976	2,826.7	1,803.9	232.3	708.8	862.8	453.5	431.4	290.6	104.4	186.2	140.8	22.1
1977	2,958.6	1,883.8	253.9	731.4	898.5	521.3	492.2	324.0	108.3	215.7	168.1	29.1
1978	3,115.2	1,961.0	267.4	753.7	939.8	576.9	540.2	362.1	119.3	242.8	178.0	36.8
1979	3,192.4	2,004.4	266.5	766.6	971.2	575.2	560.2	389.4	130.6	258.8	170.8	15.0
1980	3,187.1	2,000.4	245.9	762.6	991.9	509.3	516.2	379.2	136.2	243.0	137.0	−6.9
1981	3,248.8	2,024.2	250.8	764.4	1,009.0	545.5	521.7	395.2	148.8	246.4	126.5	23.9
1982	3,166.0	2,050.7	252.7	771.0	1,027.0	447.3	471.8	366.7	143.3	223.4	105.1	−24.5
1983	3,277.7	2,145.9	283.6	800.7	1,061.7	503.4	508.9	360.1	129.7	230.5	148.7	−5.5
1984	3,492.0	2,239.9	318.6	829.0	1,093.3	661.3	598.6	430.3	148.7	281.6	168.3	62.7
1985 p	3,573.5	2,312.6	344.7	847.4	1,120.5	650.6	643.3	471.8	165.7	306.1	171.5	7.3
1982: I	3,170.4	2,031.2	247.7	764.2	1,019.2	464.2	488.2	387.0	151.0	235.9	101.2	−24.0
II	3,179.9	2,041.0	249.1	768.3	1,023.5	467.5	473.0	369.5	144.7	224.9	103.4	−5.4
III	3,154.5	2,051.8	251.8	772.8	1,027.2	448.6	458.1	358.0	139.3	218.7	100.1	−9.4
IV	3,159.3	2,078.7	262.0	778.6	1,038.1	408.8	468.1	352.3	138.3	214.1	115.8	−59.3
1983: I	3,190.6	2,096.4	264.9	787.0	1,044.5	422.5	464.7	337.5	129.3	208.2	127.2	−42.2
II	3,259.3	2,137.2	280.6	796.8	1,059.7	489.0	492.7	346.9	125.4	221.4	145.8	−3.7
III	3,303.4	2,161.8	288.5	806.8	1,066.5	526.3	524.9	363.4	128.6	234.7	161.6	1.4
IV	3,357.2	2,188.1	300.0	812.0	1,076.1	575.9	553.2	392.9	135.4	257.5	160.4	22.6
1984: I	3,449.4	2,210.9	311.0	819.4	1,080.5	649.0	565.4	398.8	138.8	260.0	166.6	83.6
II	3,492.6	2,243.0	317.7	832.8	1,092.6	662.9	596.8	426.8	148.5	278.3	170.0	66.0
III	3,510.4	2,243.4	318.0	831.2	1,094.3	673.3	608.4	437.6	151.6	286.0	170.8	64.9
IV	3,515.6	2,262.0	327.6	829.6	1,105.8	659.9	623.8	457.8	156.0	301.9	166.0	36.1
1985: I	3,547.8	2,288.6	335.0	839.9	1,113.7	639.6	623.8	457.2	163.2	293.9	166.7	15.8
II	3,557.4	2,303.5	340.3	846.7	1,116.5	655.6	640.5	470.9	165.3	305.6	169.6	15.1
III	3,584.1	2,329.6	359.3	849.8	1,120.4	645.0	646.8	473.7	165.8	307.9	173.1	−1.8
IV p	3,605.0	2,328.7	344.3	853.0	1,131.3	662.2	662.0	485.4	168.4	317.0	176.7	.1

See next page for continuation of table.

TABLE B-2.—*Gross national product in 1982 dollars, 1929–85*—Continued

[Billions of 1982 dollars, except as noted; quarterly data at seasonally adjusted annual rates]

Year or quarter	Net exports of goods and services			Government purchases of goods and services					Final sales	Percent change from preceding period	
					Federal						
	Net exports	Exports	Imports	Total	Total	National defense	Nondefense	State and local		Gross national product	Final sales
1929	4.7	42.1	37.4	94.2	18.3			75.9	698.7		
1933	−1.4	22.7	24.2	98.5	27.0			71.5	509.2	−2.1	−3.1
1939	6.1	36.2	30.1	144.1	53.8			90.3	712.7	7.9	6.3
1940	8.2	40.0	31.7	150.2	63.6			86.6	758.5	7.8	6.4
1941	3.9	42.0	38.2	235.6	153.0			82.6	881.6	17.7	16.2
1942	−7.7	29.1	36.9	483.7	407.1			76.7	1,068.3	18.8	21.2
1943	−23.0	25.1	48.0	708.9	638.1			70.8	1,275.5	18.1	19.4
1944	−23.8	27.3	51.1	790.8	722.5			68.3	1,385.7	8.2	8.6
1945	−18.9	35.2	54.1	704.5	634.0			70.5	1,363.3	−1.9	−1.6
1946	27.0	69.0	42.0	236.9	159.3			77.6	1,069.0	−19.0	−21.6
1947	42.4	82.3	39.9	179.8	91.9			87.9	1,067.7	−2.8	−.1
1948	19.2	66.2	47.1	199.5	106.1			93.4	1,096.4	3.9	2.7
1949	18.8	65.0	46.2	226.0	119.5			106.5	1,118.7	.0	2.0
1950	4.7	59.2	54.6	230.8	116.7			114.2	1,179.5	8.5	5.4
1951	14.6	72.0	57.4	329.7	214.4			115.4	1,297.4	10.3	10.0
1952	6.9	70.1	63.3	389.9	272.7			117.3	1,370.0	3.9	5.6
1953	−2.7	66.9	69.7	419.0	295.9			123.1	1,432.5	4.0	4.6
1954	2.5	70.0	67.5	378.4	245.0			133.4	1,421.0	−1.3	−.8
1955	0	76.9	76.9	361.3	217.9			143.4	1,478.6	5.6	4.1
1956	4.3	87.9	83.6	363.7	215.4			148.3	1,512.7	2.1	2.3
1957	7.0	94.9	87.9	381.1	224.1			157.0	1,548.1	1.7	2.3
1958	−10.3	82.4	92.8	395.3	224.9			170.4	1,542.6	−.8	−.4
1959	−18.2	83.7	101.9	397.7	221.5			176.2	1,612.6	5.8	4.5
1960	−4.0	98.4	102.4	403.7	220.6			183.1	1,657.5	2.2	2.8
1961	−2.7	100.7	103.3	427.1	232.9			194.2	1,701.4	2.6	2.6
1962	−7.5	106.9	114.4	449.4	249.3			200.1	1,783.3	5.3	4.8
1963	−1.9	114.7	116.6	459.8	247.8			212.0	1,856.7	4.1	4.1
1964	5.9	128.8	122.8	470.8	244.2			226.6	1,957.6	5.3	5.4
1965	−2.7	132.0	134.7	487.0	244.4			242.5	2,062.4	5.8	5.4
1966	−13.7	138.4	152.1	532.6	273.8			258.8	2,171.5	5.8	5.3
1967	−16.9	143.6	160.5	576.2	304.4			271.8	2,242.6	2.9	3.3
1968	−29.7	155.7	185.3	597.6	309.6			288.0	2,344.6	4.1	4.5
1969	−34.9	165.0	199.9	591.2	295.6			295.6	2,398.1	2.4	2.3
1970	−30.0	178.3	208.3	572.6	268.3			304.3	2,407.9	−.3	.4
1971	−39.8	179.2	218.9	566.5	250.6			315.9	2,465.2	2.8	2.4
1972	−49.4	195.2	244.6	570.7	246.0	185.3	60.7	324.7	2,586.8	5.0	4.9
1973	−31.5	242.3	273.8	565.3	230.0	171.0	59.1	335.3	2,704.1	5.2	4.5
1974	.8	269.1	268.4	573.2	226.4	163.3	63.1	346.8	2,696.0	−.5	−.3
1975	18.9	259.7	240.8	580.9	226.3	161.1	65.2	354.6	2,707.8	−1.3	.4
1976	−11.0	274.4	285.4	580.3	224.2	157.5	66.8	356.0	2,804.6	4.9	3.6
1977	−35.5	281.6	317.1	589.1	231.8	159.2	72.7	357.2	2,929.5	4.7	4.5
1978	−26.8	312.6	339.4	604.1	233.7	160.7	73.0	370.4	3,078.4	5.3	5.1
1979	3.6	356.8	353.2	609.1	236.2	164.3	71.9	373.0	3,177.4	2.5	3.2
1980	57.0	388.9	332.0	620.5	246.9	171.2	75.7	373.6	3,194.0	−.2	.5
1981	49.4	392.7	343.4	629.7	259.6	180.3	79.3	370.1	3,225.0	1.9	1.0
1982	26.3	361.9	335.6	641.7	272.7	193.8	78.9	369.0	3,190.5	−2.5	−1.1
1983	−19.4	349.4	368.8	647.8	275.5	207.3	68.3	372.2	3,283.1	3.5	2.9
1984	−85.0	370.9	455.9	675.9	292.5	220.3	72.3	383.3	3,429.3	6.5	4.5
1985 ᵖ	−105.1	360.2	465.3	715.4	321.3	236.0	85.2	394.2	3,566.2	2.3	4.0
1982: I	40.4	374.1	333.7	634.6	267.0	185.4	81.6	367.7	3,194.4	−5.9	−1.7
II	41.7	378.5	336.8	629.7	260.5	191.6	68.9	369.2	3,185.3	1.2	−1.1
III	11.7	359.5	347.8	642.5	273.8	197.0	76.9	368.6	3,164.0	−3.2	−2.6
IV	11.7	336.0	324.3	660.1	289.5	201.4	88.2	370.6	3,218.6	.6	7.1
1983: I	22.5	342.8	320.3	649.1	279.2	203.8	75.4	369.9	3,232.8	4.0	1.8
II	−15.0	342.4	357.4	648.2	277.6	206.9	70.6	370.6	3,263.0	8.9	3.8
III	−36.2	353.1	389.3	651.5	277.4	206.5	70.9	374.1	3,302.1	5.5	4.9
IV	−48.9	359.1	408.0	642.2	267.9	211.8	56.1	374.3	3,334.6	6.7	4.0
1984: I	−60.6	362.7	423.3	650.1	271.4	214.1	57.3	378.6	3,365.7	11.4	3.8
II	−90.4	366.6	457.0	677.1	294.8	219.6	75.2	382.4	3,426.6	5.1	7.4
III	−88.7	376.9	465.6	682.4	296.7	219.6	77.1	385.7	3,445.5	2.1	2.2
IV	−100.2	377.3	477.5	693.9	307.3	227.9	79.5	386.6	3,479.5	.6	4.0
1985: I	−71.8	368.7	440.5	691.4	304.3	226.7	77.6	387.1	3,532.0	3.7	6.2
II	−101.1	358.2	459.3	699.4	305.9	231.5	74.3	393.6	3,542.3	1.1	1.2
III	−119.8	353.5	473.3	729.2	331.1	243.3	87.9	398.1	3,585.8	3.0	5.0
IV ᵖ	−127.6	360.4	488.0	741.7	343.7	242.6	101.1	398.0	3,604.8	2.4	2.1

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-3.—*Implicit price deflators for gross national product, 1929–85*

[Index numbers, 1982 = 100, except as noted; quarterly data seasonally adjusted]

Year or quarter	Gross national product	Personal consumption expenditures				Gross private domestic investment [1]				
						Fixed investment				
							Nonresidential			
		Total	Durable goods	Nondurable goods	Services	Total	Total	Structures	Producers' durable equipment	Residential
1929	14.6	16.4	22.9	17.8	13.8	11.6	11.8	10.0	14.3	11.2
1933	11.2	12.1	16.8	12.2	11.4	9.4	9.8	7.6	12.5	8.1
1939	12.7	13.9	18.7	14.2	12.8	11.1	11.5	8.8	13.9	10.5
1940	13.0	14.1	19.2	14.3	12.9	11.5	11.9	9.0	14.2	10.9
1941	13.8	15.2	20.9	15.5	13.5	12.4	12.7	9.7	14.9	11.9
1942	14.7	16.8	22.0	18.2	14.3	13.2	13.3	10.7	15.3	12.8
1943	15.1	18.4	23.3	20.6	15.1	13.8	13.8	11.4	15.4	13.8
1944	15.3	19.4	25.4	21.6	16.0	14.2	14.0	11.6	15.6	14.9
1945	15.7	20.2	27.7	22.2	16.5	14.5	14.3	12.3	15.4	15.8
1946	19.4	22.0	33.0	24.0	17.3	16.7	16.4	14.5	18.2	17.5
1947	22.1	24.3	36.1	26.9	18.6	19.8	19.3	17.1	20.7	21.1
1948	23.6	25.7	37.1	28.5	19.7	21.7	21.0	18.9	22.5	22.8
1949	23.5	25.6	36.9	27.7	20.5	22.2	21.7	18.6	24.0	23.0
1950	23.9	26.2	38.1	27.8	21.1	22.9	22.4	18.8	25.0	23.7
1951	25.1	27.8	40.0	30.1	22.2	24.6	24.2	21.1	26.4	25.4
1952	25.5	28.4	40.1	30.5	23.3	25.0	24.4	21.3	26.9	26.1
1953	25.9	29.0	40.8	30.4	24.6	25.5	25.1	21.8	27.7	26.3
1954	26.3	29.1	39.4	30.4	25.3	25.6	25.2	21.4	28.6	26.4
1955	27.2	29.5	40.1	30.2	25.9	26.3	25.8	21.8	29.3	27.0
1956	28.1	30.1	41.2	30.6	26.7	27.8	27.7	24.1	31.0	27.9
1957	29.1	31.0	42.9	31.5	27.6	29.0	29.5	25.2	33.3	28.0
1958	29.7	31.6	42.8	32.2	28.5	28.9	29.5	24.8	34.0	28.0
1959	30.4	32.3	44.2	32.6	29.3	29.3	30.2	25.0	34.7	28.0
1960	30.9	32.9	44.4	33.1	30.2	29.7	30.6	25.2	35.6	28.2
1961	31.2	33.3	44.8	33.5	30.7	29.7	30.5	25.0	35.9	28.2
1962	31.9	33.9	45.7	33.8	31.4	29.9	30.9	25.2	36.1	28.3
1963	32.4	34.4	46.3	34.3	32.0	30.1	31.3	25.5	36.2	28.2
1964	32.9	35.0	47.0	34.7	32.5	30.4	31.5	25.9	36.2	28.5
1965	33.8	35.6	47.1	35.3	33.2	31.1	32.1	26.9	36.4	29.0
1966	35.0	36.7	47.5	36.6	34.2	32.4	33.3	28.2	37.2	29.9
1967	35.9	37.6	48.3	37.5	35.3	33.4	34.4	29.1	38.4	30.9
1968	37.7	39.3	50.1	39.0	36.8	34.8	35.9	30.4	39.9	32.5
1969	39.8	41.0	51.4	40.9	38.6	37.2	37.9	32.9	41.5	35.6
1970	42.0	42.9	52.7	42.7	40.7	39.0	39.9	35.2	43.2	37.0
1971	44.4	44.9	54.7	44.2	43.1	41.2	42.4	38.1	45.5	39.0
1972	46.5	46.7	55.5	45.8	45.1	43.2	44.4	40.6	46.8	41.2
1973	49.5	49.6	56.6	49.7	47.4	45.6	46.0	43.7	47.3	44.8
1974	54.0	54.8	60.4	57.2	51.3	50.3	50.5	49.5	51.1	49.8
1975	59.3	59.2	65.9	61.5	55.6	56.9	57.9	54.7	59.7	54.2
1976	63.1	62.6	69.5	63.8	59.8	60.7	61.9	57.6	64.4	58.0
1977	67.3	66.7	72.7	67.1	64.8	65.6	66.1	61.6	68.3	64.6
1978	72.2	71.6	76.9	71.9	69.8	71.9	71.5	67.9	73.3	72.6
1979	78.6	78.2	82.1	80.0	75.6	78.9	77.8	76.2	78.6	81.4
1980	85.7	86.6	89.2	89.4	83.9	86.3	85.1	83.6	86.0	89.4
1981	94.0	94.6	95.7	96.9	92.6	94.2	93.4	93.1	93.7	96.6
1982	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1983	103.8	103.9	102.1	102.0	105.7	99.9	98.9	97.2	99.9	102.2
1984	108.1	108.2	103.9	105.4	111.5	101.4	99.4	99.3	99.5	106.4
1985 p	111.7	111.6	104.7	107.7	116.8	102.8	100.8	102.6	99.9	108.2
1982: I	98.2	98.3	98.9	99.2	97.4	99.1	98.7	99.5	98.2	100.5
II	99.4	99.2	99.9	99.3	98.9	100.0	99.9	100.3	99.7	100.2
III	100.8	100.7	100.4	100.5	100.9	100.7	100.8	100.7	100.8	100.4
IV	101.7	101.8	100.7	101.0	102.7	100.3	100.7	99.5	101.5	99.1
1983: I	102.4	102.4	101.3	100.7	103.9	100.6	100.1	98.7	101.1	102.0
II	103.2	103.4	101.6	101.9	105.0	99.3	98.9	96.9	100.0	100.3
III	104.1	104.3	102.4	102.4	106.2	99.8	98.3	96.9	99.1	103.2
IV	105.3	105.4	103.1	103.1	107.8	99.8	98.4	96.4	99.5	103.1
1984: I	106.6	106.7	103.4	104.5	109.2	100.2	98.8	97.2	99.6	103.6
II	107.6	107.6	103.9	104.8	110.8	101.3	99.2	98.9	99.3	106.5
III	108.6	108.7	104.1	105.5	112.5	101.8	99.6	99.8	99.5	107.6
IV	109.6	109.6	104.2	106.6	113.5	102.1	100.1	100.8	99.7	107.9
1985: I	110.4	110.3	104.9	106.7	114.7	102.4	100.5	101.8	99.8	107.7
II	111.3	111.3	104.8	107.5	116.1	102.6	100.7	102.7	99.6	107.9
III	112.1	111.9	104.6	107.6	117.4	103.0	101.0	102.8	100.1	108.2
IV p	113.0	113.1	104.3	109.0	118.9	103.2	101.1	103.1	100.0	109.0

See next page for continuation of table.

Table B–3.—*Implicit price deflators for gross national product, 1929–85*—Continued

[Index numbers, 1982=100, except as noted; quarterly data seasonally adjusted]

Year or quarter	Exports and imports of goods and services [1]		Government purchases of goods and services					Final sales	Percent change from preceding period [2]	
			Total	Federal			State and local			
	Exports	Imports		Total	National defense	Non-defense			GNP implicit price deflator	Final sales implicit price deflator
1929	16.8	15.9	9.4	8.1			9.7	14.6		
1933	10.7	8.6	8.4	8.0			8.6	11.3	−2.2	−2.5
1939	12.7	11.3	9.4	9.7			9.2	12.8	−.8	−.9
1940	13.6	11.6	9.5	9.7			9.3	13.0	2.0	1.5
1941	14.6	12.3	10.6	11.1			9.7	13.7	6.2	6.0
1942	17.2	13.1	12.4	12.8			10.2	14.7	6.6	7.2
1943	18.5	13.6	12.5	12.8			10.6	15.2	2.6	3.0
1944	20.2	14.1	12.3	12.4			11.2	15.3	1.4	1.1
1945	21.1	14.6	11.8	11.8			11.6	15.7	2.9	2.6
1946	22.0	17.4	12.3	12.0			12.8	19.3	22.9	22.5
1947	24.6	20.9	14.7	14.8			14.5	22.1	13.9	14.6
1948	26.5	22.4	16.3	16.3			16.3	23.4	7.0	6.1
1949	25.2	21.2	17.3	17.6			16.9	23.5	−.5	.5
1950	24.4	22.5	16.8	16.3			17.3	23.9	2.0	1.3
1951	27.4	26.7	18.3	18.0			18.9	24.9	4.8	4.4
1952	27.4	25.3	19.4	19.3			19.7	25.4	1.5	2.1
1953	27.0	24.1	19.8	19.6			20.2	25.9	1.6	1.8
1954	26.9	24.1	20.1	19.7			20.7	26.3	1.6	1.6
1955	27.5	23.5	20.8	20.6			21.2	27.1	3.2	2.8
1956	28.6	23.8	21.9	21.5			22.4	28.0	3.4	3.4
1957	29.7	23.8	22.9	22.5			23.5	29.0	3.6	3.7
1958	29.6	22.7	24.1	24.2			24.0	29.7	2.1	2.3
1959	29.9	23.1	24.6	24.6			24.6	30.4	2.4	2.4
1960	30.4	23.4	24.9	24.7			25.2	30.9	1.6	1.6
1961	30.9	23.1	25.4	25.0			25.9	31.2	1.0	1.0
1962	31.0	22.9	26.3	25.9			26.7	31.9	2.2	2.2
1963	31.1	23.6	26.9	26.5			27.4	32.4	1.6	1.6
1964	31.4	24.1	27.6	27.2			28.0	32.9	1.5	1.5
1965	32.5	24.7	28.5	28.1			28.8	33.7	2.7	2.4
1966	33.7	25.7	29.8	29.4			30.2	34.9	3.6	3.6
1967	34.5	26.2	31.2	30.5			32.0	35.9	2.6	2.9
1968	35.2	26.6	33.1	32.3			33.9	37.7	5.0	5.0
1969	36.6	27.4	35.1	33.8			36.3	39.8	5.6	5.6
1970	38.7	29.0	38.1	36.8			39.2	42.0	5.5	5.5
1971	40.4	30.2	41.0	39.8			41.9	44.4	5.7	5.7
1972	41.7	32.0	43.8	43.0	41.8	46.8	44.4	46.5	4.7	4.7
1973	47.1	35.5	47.1	46.2	45.3	48.9	47.8	49.5	6.5	6.5
1974	56.3	50.4	52.2	51.3	50.6	53.3	52.8	54.1	9.1	9.3
1975	62.1	54.1	57.7	57.1	55.6	60.6	58.1	59.2	9.8	9.4
1976	64.8	55.7	61.5	60.8	59.3	64.3	62.0	63.0	6.4	6.4
1977	68.0	59.8	65.8	65.2	63.4	69.1	66.1	67.2	6.7	6.7
1978	72.8	65.8	70.4	69.2	67.8	72.4	71.1	72.1	7.3	7.3
1979	81.6	77.1	76.8	75.4	74.2	78.0	77.7	78.5	8.9	8.9
1980	90.2	96.0	85.5	84.3	83.4	86.4	86.2	85.8	9.0	9.3
1981	97.5	101.6	93.4	93.3	92.9	94.3	93.4	93.9	9.7	9.4
1982	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	6.4	6.5
1983	101.4	97.5	104.3	103.4	104.0	101.3	105.0	103.8	3.8	4.0
1984	103.7	97.4	109.0	107.0	107.6	105.1	110.6	108.1	4.1	4.2
1985 p	102.8	95.6	113.9	110.2	111.0	107.9	116.9	111.7	3.3	3.3
1982: I	99.7	101.4	98.0	98.5	98.3	99.0	97.7	98.2	6.4	5.9
II	100.1	100.0	99.4	99.6	99.4	100.2	99.2	99.3	5.0	4.6
III	100.1	99.3	100.7	100.5	100.2	101.5	100.9	100.8	5.8	6.2
IV	100.0	99.3	101.8	101.3	102.0	99.5	102.2	101.7	3.6	3.6
1983: I	100.5	98.7	103.1	102.8	102.7	103.1	103.3	102.4	2.8	2.8
II	100.8	97.2	104.0	103.4	103.7	102.6	104.4	103.3	3.2	3.6
III	101.5	97.0	104.5	103.1	104.5	99.0	105.6	104.2	3.5	3.5
IV	102.7	97.1	105.7	104.2	105.3	100.1	106.7	105.2	4.7	3.9
1984: I	103.5	97.5	107.1	105.2	106.6	99.9	108.5	106.5	5.0	5.0
II	104.3	98.0	108.6	106.8	107.4	105.0	109.9	107.6	3.8	4.2
III	103.8	97.3	109.5	107.3	107.6	106.7	111.2	108.7	3.8	4.2
IV	103.2	96.7	110.7	108.3	108.6	107.5	112.7	109.6	3.7	3.4
1985: I	102.9	95.8	112.4	109.9	110.1	109.4	114.4	110.4	3.0	3.0
II	103.1	95.7	113.6	110.4	110.6	110.0	116.1	111.4	3.3	3.7
III	102.7	95.3	114.2	110.2	110.9	108.1	117.5	112.0	2.9	2.2
IV p	102.6	95.7	115.1	110.1	112.3	105.0	119.4	113.0	3.3	3.6

[1] Separate deflators are not calculated for gross private domestic investment, change in business inventories, and net exports of goods and services.

[2] Quarterly changes are at annual rates.

Source: Department of Commerce, Bureau of Economic Analysis.

Table B-4.—*Fixed-weighted price indexes for gross national product, 1982 weights, 1959–85*

[Index numbers, 1982 = 100, except as noted; quarterly data seasonally adjusted]

Year or quarter	Gross national product	Personal consumption expenditures	Gross private domestic investment ¹			Exports and imports of goods and services ¹		Government purchases of goods and services					Percent change from preceding period, gross national product fixed-weighted price index ²
			Fixed investment						Federal				
			Total	Nonresidential	Residential	Exports	Imports	Total	Total	National defense	Nondefense	State and local	
1959	37.6	35.2	58.0	65.9	30.2	32.8	27.0	25.8	26.9			24.9	
1960	38.1	35.7	58.1	66.1	30.3	33.5	27.3	26.4	27.3			25.7	1.3
1961	38.4	36.1	58.0	66.0	30.2	34.0	27.0	27.0	27.8			26.4	.7
1962	38.7	36.4	58.0	66.1	29.9	34.1	26.7	27.8	28.4			27.3	.8
1963	39.1	36.8	58.0	66.2	29.5	34.4	27.1	28.5	29.3			27.9	1.0
1964	39.6	37.2	58.2	66.4	29.6	34.8	27.7	29.3	30.1			28.5	1.2
1965	40.1	37.7	58.5	66.7	30.0	35.9	28.1	30.0	30.8			29.3	1.4
1966	41.1	38.5	59.3	67.4	30.8	37.1	29.1	31.3	32.0			30.6	2.5
1967	42.1	39.5	60.2	68.4	31.6	38.2	29.5	32.7	32.8			32.5	2.6
1968	43.7	41.0	61.4	69.5	33.1	39.3	30.1	34.5	34.5			34.4	3.7
1969	45.6	42.8	63.2	71.0	36.0	40.9	31.2	36.6	36.4			36.7	4.4
1970	47.2	44.7	61.5	68.4	37.4	43.3	33.4	39.6	39.5			39.6	3.6
1971	48.8	46.6	60.6	66.6	39.5	45.3	35.6	42.3	42.4			42.2	3.5
1972	50.3	48.3	59.8	65.0	41.6	46.5	37.8	45.2	46.0	44.3	50.5	44.6	2.9
1973	53.1	51.0	61.8	66.6	45.1	50.8	42.4	48.8	50.1	47.4	56.9	47.8	5.5
1974	57.2	55.8	64.4	68.5	50.1	59.8	54.5	53.5	54.8	51.4	63.3	52.6	7.8
1975	61.8	60.1	69.0	73.1	54.6	65.4	59.7	58.6	59.4	56.5	66.6	57.9	8.0
1976	65.1	63.5	71.4	75.2	58.4	67.4	61.3	62.2	62.4	59.7	69.0	62.0	5.3
1977	68.4	67.5	72.6	74.9	64.8	70.3	66.1	66.0	65.8	63.5	71.5	66.2	5.1
1978	72.7	72.2	74.5	75.0	72.5	74.5	71.3	70.9	70.6	68.6	75.5	71.2	6.2
1979	78.8	78.6	80.3	80.1	81.2	82.9	80.9	77.3	76.8	75.1	81.0	77.7	8.5
1980	86.1	86.8	86.9	86.1	89.4	90.5	96.3	86.3	86.4	84.7	90.6	86.2	9.3
1981	94.1	94.6	94.5	93.9	96.6	97.7	101.5	94.1	94.9	93.8	97.4	93.5	9.3
1982	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	6.2
1983	104.0	104.0	100.3	99.7	102.3	101.6	97.7	104.7	104.2	103.8	105.0	105.1	4.0
1984	108.5	108.5	102.0	100.7	106.4	104.6	97.6	109.6	107.9	107.6	108.6	110.8	4.3
1985 ᵖ	112.4	112.2	103.9	102.7	108.2	104.4	95.8	114.5	110.9	111.3	109.9	117.3	3.6
1982: I	98.2	98.3	99.2	98.8	100.5	99.7	101.4	98.1	98.7	98.5	99.2	97.7	5.7
II	99.4	99.1	100.0	100.0	100.2	100.1	100.0	99.4	99.6	99.6	99.7	99.2	4.7
III	100.7	100.7	100.6	100.7	100.4	100.1	99.3	100.5	100.0	100.1	99.7	100.9	5.5
IV	101.7	101.8	100.2	100.5	99.1	100.0	99.3	102.0	101.7	101.8	101.4	102.2	4.0
1983: I	102.5	102.4	100.6	100.2	102.0	100.6	98.7	103.1	102.7	102.4	103.3	103.3	3.2
II	103.5	103.5	99.7	99.5	100.4	101.0	97.4	104.2	103.8	103.7	104.1	104.4	3.8
III	104.5	104.5	100.4	99.6	103.2	101.8	97.5	105.2	104.5	104.1	105.7	105.7	4.0
IV	105.6	105.6	100.4	99.5	103.3	103.2	97.5	106.3	105.6	105.1	106.9	106.8	4.3
1984: I	106.9	106.9	100.6	99.7	103.8	104.0	97.7	108.0	107.2	106.7	108.3	108.6	5.1
II	108.1	107.9	101.7	100.4	106.4	105.1	98.1	109.3	108.1	107.8	108.8	110.1	4.3
III	109.1	109.0	102.5	101.1	107.5	104.8	97.6	109.9	107.8	107.5	108.7	111.4	3.7
IV	110.0	110.0	103.0	101.6	107.8	104.4	97.1	111.0	108.4	108.3	108.5	112.9	3.5
1985: I	110.9	110.7	103.3	102.0	107.7	104.4	95.9	112.7	109.9	110.2	109.1	114.7	3.5
II	111.9	111.8	103.6	102.4	107.9	104.6	95.9	113.8	110.1	110.5	109.2	116.5	3.6
III	112.7	112.5	104.1	102.9	108.2	104.2	95.5	114.8	110.6	111.1	109.1	117.9	2.7
IV ᵖ	113.9	113.8	104.6	103.3	108.9	104.3	95.9	116.6	112.3	113.1	110.2	119.9	4.5

[1] Separate deflators are not calculated for gross private domestic investment, change in business inventories, and net exports of goods and services.

[2] Quarterly changes are at annual rates.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-5.—*Changes in gross national product, personal consumption expenditures, and related price measures, 1933–85*

[Percent change from preceding period; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross national product					Personal consumption expenditures				
	Current dollars	Constant (1982) dollars	Implicit price deflator	Chain price index	Fixed-weighted price index (1982 weights)	Current dollars	Constant (1982) dollars	Implicit price deflator	Chain price index	Fixed-weighted price index (1982 weights)
1933	−4.2	−2.1	−2.2	....	....	−5.7	−1.6	−4.2	....	....
1939	7.0	7.9	−.8	....	....	4.6	5.1	−.5	....	....
1940	10.0	7.8	2.0	....	....	6.0	4.6	1.3	....	....
1941	25.0	17.7	6.2	....	....	13.8	5.7	7.7	....	....
1942	26.6	18.8	6.6	....	....	9.7	−.7	10.4	....	....
1943	21.2	18.1	2.6	....	....	12.2	2.3	9.6	....	....
1944	9.7	8.2	1.4	....	....	8.8	3.2	5.4	....	....
1945	.9	−1.9	2.9	....	....	10.5	6.4	3.9	....	....
1946	−.5	−19.0	22.9	....	....	20.4	10.5	8.9	....	....
1947	10.8	−2.8	13.9	....	....	12.5	1.8	10.6	....	....
1948	11.2	3.9	7.0	....	....	8.0	2.3	5.6	....	....
1949	−.5	.0	−.5	....	....	1.9	2.0	−.1	....	....
1950	10.7	8.5	2.0	....	....	7.7	5.4	2.2	....	....
1951	15.7	10.3	4.8	....	....	8.3	2.1	6.1	....	....
1952	5.5	3.9	1.5	....	....	5.3	3.0	2.2	....	....
1953	5.7	4.0	1.6	....	....	6.2	4.0	2.1	....	....
1954	.2	−1.3	1.6	....	....	3.1	2.5	.6	....	....
1955	9.0	5.6	3.2	....	....	7.5	6.2	1.3	....	....
1956	5.5	2.1	3.4	....	....	4.9	3.0	1.9	....	....
1957	5.3	1.7	3.6	....	....	5.4	2.2	3.2	....	....
1958	1.3	−.8	2.1	....	....	3.3	1.4	1.8	....	....
1959	8.5	5.8	2.4	....	....	7.4	5.0	2.2	....	....
1960	3.9	2.2	1.6	1.5	1.3	4.6	2.6	1.9	1.6	1.5
1961	3.6	2.6	1.0	2.8	.7	3.1	2.0	1.2	1.1	.9
1962	7.6	5.3	2.2	1.3	.8	6.1	4.3	1.8	1.1	.9
1963	5.6	4.1	1.6	1.4	1.0	5.5	3.7	1.5	1.4	1.1
1964	7.1	5.3	1.5	1.5	1.2	7.2	5.6	1.7	1.2	1.2
1965	8.5	5.8	2.7	1.8	1.4	7.7	5.6	1.7	1.5	1.2
1966	9.5	5.8	3.6	3.1	2.5	8.3	5.1	3.1	2.7	2.2
1967	5.8	2.9	2.6	2.9	2.6	5.5	3.0	2.5	2.5	2.5
1968	9.3	4.1	5.0	4.3	3.7	9.7	5.1	4.5	4.0	3.8
1969	8.0	2.4	5.6	5.1	4.4	8.2	3.6	4.3	4.4	4.3
1970	5.4	−.3	5.5	5.3	3.6	7.0	2.4	4.6	4.7	4.6
1971	8.6	2.8	5.7	5.2	3.5	8.1	3.1	4.7	4.3	4.2
1972	10.0	5.0	4.7	4.3	2.9	9.5	5.4	4.0	3.6	3.5
1973	12.1	5.2	6.5	5.8	5.5	10.5	4.2	6.2	6.0	5.7
1974	8.3	−.5	9.1	13.9	7.8	9.5	−.9	10.5	10.3	9.4
1975	8.5	−1.3	9.8	9.9	8.0	10.5	2.3	8.0	8.0	7.7
1976	11.5	4.9	6.4	5.8	5.3	11.5	5.4	5.7	5.7	5.6
1977	11.7	4.7	6.7	6.5	5.1	11.3	4.4	6.5	6.4	6.3
1978	13.0	5.3	7.3	6.9	6.2	11.6	4.1	7.3	7.2	7.0
1979	11.5	2.5	8.9	8.0	8.5	11.6	2.2	9.2	9.2	8.8
1980	8.9	−.2	9.0	9.1	9.3	10.6	−.2	10.7	10.9	10.5
1981	11.7	1.9	9.7	9.5	9.3	10.5	1.2	9.2	9.2	9.0
1982	3.7	−2.5	6.4	6.4	6.2	7.1	1.3	5.7	5.7	5.6
1983	7.4	3.5	3.8	4.0	4.0	8.7	4.6	3.9	4.0	4.0
1984	11.0	6.5	4.1	4.2	4.3	8.7	4.4	4.1	4.2	4.3
1985 ᵖ	5.8	2.3	3.3	3.5	3.6	6.6	3.2	3.1	3.4	3.4
1982: I	−.2	−5.9	6.4	5.4	5.7	7.6	2.2	5.5	5.2	5.2
II	6.2	1.2	5.0	6.4	4.7	5.6	1.9	3.7	3.6	3.5
III	2.5	−3.2	5.8	5.7	5.5	8.5	2.1	6.2	6.3	6.3
IV	4.2	.6	3.6	3.8	4.0	10.3	5.3	4.4	4.8	4.8
1983: I	7.2	4.0	2.8	3.2	3.2	5.6	3.4	2.4	2.2	2.3
II	12.3	8.9	3.2	2.8	3.8	12.5	8.0	4.0	4.2	4.2
III	8.9	5.5	3.5	4.7	4.0	8.4	4.7	3.5	3.7	3.8
IV	11.8	6.7	4.7	2.9	4.3	9.4	5.0	4.3	4.4	4.4
1984: I	17.0	11.4	5.0	4.8	5.1	9.4	4.2	5.0	5.1	5.2
II	9.1	5.1	3.8	6.1	4.3	9.8	5.9	3.4	3.7	3.8
III	6.0	2.1	3.8	3.8	3.7	4.1	.1	4.2	4.1	4.2
IV	4.3	.6	3.7	3.9	3.5	6.9	3.4	3.4	3.6	3.6
1985: I	6.9	3.7	3.0	3.5	3.5	7.4	4.8	2.6	2.7	2.7
II	4.5	1.1	3.3	3.6	3.6	6.2	2.6	3.7	3.7	3.8
III	5.8	3.0	2.9	2.5	2.7	6.8	4.6	2.2	2.4	2.6
IV ᵖ	5.9	2.4	3.3	3.9	4.5	4.2	−.2	4.4	4.7	4.7

Source: Department of Commerce, Bureau of Economic Analysis.

Table B–6.—*Gross national product by major type of product, 1929–85*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross national product	Final sales	Inventory change	Goods							Services	Structures	Auto output
				Total			Durable goods		Nondurable goods				
				Total	Final sales	Inventory change	Final sales	Inventory change	Final sales	Inventory change			
1929	103.9	102.2	1.7	56.1	54.4	1.7	16.1	1.4	38.3	0.3	35.9	11.9	……
1933	56.0	57.6	−1.6	27.0	28.6	−1.6	5.4	−.5	23.2	−1.1	25.9	3.1	……
1939	91.3	90.9	.4	49.0	48.6	.4	12.4	.3	36.2	.1	34.5	7.8	……
1940	100.4	98.3	2.2	56.0	53.8	2.2	15.4	1.2	38.4	1.0	35.8	8.6	……
1941	125.5	121.0	4.5	72.5	68.0	4.5	23.8	3.1	44.2	1.4	40.9	12.1	……
1942	159.0	157.2	1.8	93.7	91.9	1.8	34.5	1.0	57.4	.7	50.9	14.4	……
1943	192.7	193.4	−.6	120.4	121.0	−.6	54.2	.0	66.8	−.6	63.2	9.2	……
1944	211.4	212.3	−1.0	132.3	133.3	−1.0	58.5	−.6	74.8	−.3	72.4	6.6	……
1945	213.4	214.4	−1.0	128.9	129.9	−1.0	50.1	−1.3	79.8	.2	77.3	7.2	……
1946	212.4	206.0	6.4	125.3	118.9	6.4	31.8	5.3	87.1	1.1	70.5	16.6	……
1947	235.2	235.7	−.5	139.8	140.3	−.5	44.4	1.4	95.9	−1.9	72.7	22.8	7.2
1948	261.6	256.9	4.7	154.4	149.7	4.7	48.0	1.0	101.7	3.7	78.0	29.2	8.8
1949	260.4	263.4	−3.1	147.7	150.8	−3.1	50.0	−1.8	100.9	−1.3	83.0	29.6	11.9
1950	288.3	281.4	6.8	162.4	155.6	6.8	56.2	3.6	99.4	3.2	89.0	36.9	15.4
1951	333.4	323.2	10.2	189.9	179.6	10.2	66.4	6.1	113.2	4.2	104.4	39.1	13.3
1952	351.6	348.6	3.1	195.5	192.4	3.1	72.6	1.2	119.8	1.9	115.2	40.9	12.0
1953	371.6	371.1	.4	204.6	204.2	.4	78.0	1.5	126.2	−1.1	123.4	43.6	16.1
1954	372.5	374.1	−1.6	198.0	199.6	−1.6	74.1	−2.5	125.5	.9	128.5	46.0	14.7
1955	405.9	400.2	5.7	216.3	210.6	5.7	81.7	3.4	128.9	2.3	138.5	51.1	21.2
1956	428.2	423.6	4.6	225.4	220.7	4.6	86.2	2.1	134.5	2.5	148.9	53.9	16.9
1957	451.0	449.6	1.4	234.7	233.3	1.4	91.7	.5	141.6	.9	161.6	54.8	19.4
1958	456.8	458.3	−1.5	230.5	232.0	−1.5	84.8	−2.8	147.2	1.3	170.9	55.5	14.5
1959	495.8	490.0	5.8	250.8	245.1	5.8	91.1	3.1	154.0	2.6	183.5	61.5	19.4
1960	515.3	512.3	3.1	257.2	254.1	3.1	93.8	1.6	160.3	1.4	197.4	60.7	21.3
1961	533.8	531.4	2.4	260.4	258.0	2.4	93.1	−.1	164.8	2.5	210.9	62.5	17.8
1962	574.6	568.5	6.1	281.5	275.4	6.1	103.4	3.4	172.0	2.7	226.4	66.7	22.4
1963	606.9	601.1	5.8	293.2	287.4	5.8	110.0	2.7	177.4	3.1	242.2	71.5	25.1
1964	649.8	644.4	5.4	313.5	308.1	5.4	119.6	4.0	188.5	1.4	261.1	75.2	25.9
1965	705.1	695.2	9.9	342.9	333.0	9.9	132.4	6.7	200.6	3.2	280.5	81.7	31.1
1966	772.0	757.8	14.2	380.1	365.9	14.2	147.9	10.2	218.1	4.0	307.2	84.6	30.2
1967	816.4	806.1	10.3	395.1	384.9	10.3	154.5	5.5	230.4	4.8	334.9	86.4	27.8
1968	892.7	884.8	7.9	427.4	419.5	7.9	169.1	4.7	250.4	3.2	368.0	97.2	35.0
1969	963.9	954.1	9.8	456.6	446.8	9.8	180.1	6.4	266.7	3.4	402.3	105.1	34.7
1970	1,015.5	1,012.3	3.1	467.8	464.7	3.1	182.1	−.1	282.6	3.2	441.1	106.5	28.5
1971	1,102.7	1,094.9	7.8	493.0	485.2	7.8	189.4	2.8	295.8	4.9	484.9	124.8	38.9
1972	1,212.8	1,202.3	10.5	537.4	526.9	10.5	209.7	7.2	317.2	3.3	533.2	142.1	41.4
1973	1,359.3	1,339.7	19.6	616.4	596.8	19.6	241.9	15.0	354.9	4.6	586.6	156.3	46.0
1974	1,472.8	1,457.4	15.4	663.1	647.7	15.4	257.2	11.2	390.4	4.3	650.6	159.1	38.8
1975	1,598.4	1,604.1	−5.6	714.7	720.3	−5.6	288.2	−7.0	432.2	1.3	725.2	158.5	40.3
1976	1,782.8	1,766.8	16.0	798.9	782.9	16.0	323.6	10.3	459.3	5.7	803.5	180.4	55.2
1977	1,990.5	1,969.2	21.3	882.0	860.7	21.3	369.4	9.7	491.3	11.6	895.9	212.6	64.3
1978	2,249.7	2,221.0	28.6	991.4	962.8	28.6	416.9	20.1	545.9	8.6	1,003.0	255.3	68.3
1979	2,508.2	2,495.2	13.0	1,099.1	1,086.1	13.0	473.1	10.3	613.0	2.7	1,121.9	287.1	66.9
1980	2,732.0	2,740.3	−8.3	1,174.9	1,183.2	−8.3	499.4	−2.9	683.8	−5.4	1,265.0	292.0	60.1
1981	3,052.6	3,028.6	24.0	1,322.9	1,298.9	24.0	541.1	6.8	757.8	17.2	1,415.4	314.4	69.4
1982	3,166.0	3,190.5	−24.5	1,319.1	1,343.7	−24.5	542.9	−16.8	800.8	−7.7	1,547.5	299.4	66.5
1983	3,401.6	3,408.0	−6.4	1,394.7	1,401.1	−6.4	573.2	−.9	827.9	−5.5	1,678.0	328.9	88.9
1984	3,774.7	3,707.6	67.1	1,585.8	1,518.8	67.1	642.5	37.0	876.2	30.1	1,806.6	382.2	103.4
1985 ᵖ	3,992.5	3,983.4	9.1	1,644.2	1,635.2	9.1	704.6	7.9	930.6	1.2	1,928.8	419.5	113.6
1982 I	3,112.6	3,136.7	−24.1	1,310.7	1,334.8	−24.1	537.7	−14.6	797.1	−9.5	1,499.1	302.8	58.7
II	3,159.5	3,164.5	−5.0	1,329.9	1,335.0	−5.0	539.5	−4.1	795.5	−.9	1,530.3	299.3	68.4
III	3,179.4	3,188.4	−9.0	1,326.2	1,335.2	−9.0	542.6	−5.7	792.7	−3.3	1,561.6	291.6	74.4
IV	3,212.5	3,272.4	−59.9	1,309.8	1,369.7	−59.9	551.8	−42.7	817.9	−17.2	1,598.9	303.9	64.5
1983 I	3,268.7	3,311.4	−42.7	1,328.4	1,371.1	−42.7	542.4	−28.9	828.7	−13.9	1,632.2	308.0	79.4
II	3,365.1	3,370.6	−5.5	1,385.0	1,390.5	−5.5	566.3	−.9	824.2	−4.7	1,662.5	317.6	79.6
III	3,437.5	3,440.3	−2.8	1,399.9	1,402.7	−2.8	576.4	12.9	826.3	−15.7	1,693.3	344.3	96.0
IV	3,535.0	3,509.5	25.5	1,465.3	1,439.8	25.5	607.4	13.5	832.4	12.1	1,724.1	345.6	100.5
1984 I	3,676.5	3,584.4	92.1	1,558.1	1,466.0	92.1	618.5	43.2	847.4	48.9	1,757.9	360.5	111.8
II	3,757.5	3,688.7	68.9	1,585.4	1,516.5	68.9	637.6	36.1	878.9	32.8	1,789.2	383.0	95.0
III	3,812.2	3,743.9	68.3	1,595.8	1,527.5	68.3	641.4	39.4	886.1	28.9	1,823.8	392.6	100.5
IV	3,852.5	3,813.5	39.0	1,604.0	1,565.0	39.0	672.6	29.3	892.5	9.7	1,855.6	392.9	106.3
1985 I	3,917.5	3,899.0	18.5	1,628.4	1,609.8	18.5	689.4	16.9	920.5	1.6	1,887.6	401.5	119.4
II	3,960.6	3,945.0	15.5	1,636.0	1,620.5	15.5	704.0	1.8	916.5	13.7	1,908.2	416.3	107.7
III	4,016.9	4,016.7	.2	1,650.8	1,650.6	.2	721.2	−6.4	929.4	6.6	1,939.9	426.2	117.5
IV ᵖ	4,075.1	4,073.0	2.1	1,661.8	1,659.7	2.1	703.7	19.1	956.0	−17.0	1,979.4	433.9	109.9

Source: Department of Commerce, Bureau of Economic Analysis.

Table B-7.—*Gross national product by major type of product in 1982 dollars, 1929–85*

[Billions of 1982 dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross national product	Final sales	Inventory change	Goods							Services	Structures	Auto output
				Total			Durable goods		Nondurable goods				
				Total	Final sales	Inventory change	Final sales	Inventory change	Final sales	Inventory change			
1929	709.6	698.7	10.8	308.1	297.3	10.8	85.8	3.5	211.5	1.6	290.0	111.4	....
1933	498.5	509.2	−10.7	210.0	220.7	−10.7	34.9	−2.1	185.7	−2.5	252.1	36.5	....
1939	716.6	712.7	3.9	331.7	327.8	3.9	74.8	.7	253.1	2.1	306.4	78.5	....
1940	772.9	758.5	14.4	370.3	355.9	14.4	91.9	3.4	264.0	4.2	318.1	84.5	....
1941	909.4	881.6	27.8	431.9	404.2	27.8	122.9	8.2	281.2	6.0	367.1	110.3	....
1942	1,080.3	1,068.3	12.0	504.1	492.1	12.0	163.3	3.5	328.8	5.2	460.4	115.8	....
1943	1,276.2	1,275.5	.7	608.6	607.9	.7	254.4	.7	353.5	.7	598.9	68.7	....
1944	1,380.6	1,385.7	−5.2	664.6	669.8	−5.2	292.4	−1.8	377.4	−1.2	665.0	50.9	....
1945	1,354.8	1,363.3	−8.4	639.1	647.5	−8.4	263.1	−3.7	384.4	−1.5	662.3	53.5	....
1946	1,096.9	1,069.0	27.9	521.0	493.1	27.9	129.6	10.8	363.5	.8	472.0	104.0	....
1947	1,066.7	1,067.7	−1.0	517.1	518.1	−1.0	164.7	1.4	353.4	−3.6	431.0	118.6	24.1
1948	1,108.7	1,096.4	12.3	531.7	519.4	12.3	166.5	1.6	353.0	8.3	438.1	138.9	27.6
1949	1,109.0	1,118.7	−9.7	517.9	527.6	−9.7	166.8	−2.9	360.8	−3.8	450.1	141.0	35.5
1950	1,203.7	1,179.5	24.2	561.4	537.2	24.2	180.0	5.5	357.1	11.4	470.4	171.9	44.9
1951	1,328.2	1,297.4	30.8	623.0	592.2	30.8	208.8	9.0	383.4	11.9	537.7	167.5	38.3
1952	1,380.0	1,370.0	10.0	641.3	631.3	10.0	229.8	1.7	401.5	5.3	567.3	171.4	34.9
1953	1,435.3	1,432.5	2.8	676.6	673.8	2.8	245.4	2.3	428.4	−2.2	577.6	181.2	44.8
1954	1,416.2	1,421.0	−4.8	643.5	648.2	−4.8	230.6	−3.7	417.7	2.5	579.5	193.2	43.3
1955	1,494.9	1,478.6	16.3	683.9	667.6	16.3	245.2	4.5	422.3	5.8	601.0	210.0	58.2
1956	1,525.6	1,512.7	12.9	697.1	684.1	12.9	248.3	2.9	435.8	5.6	619.7	208.9	45.8
1957	1,551.1	1,548.1	3.0	699.3	696.3	3.0	251.3	.9	445.0	1.5	645.4	206.5	48.3
1958	1,539.2	1,542.6	−3.4	674.2	677.6	−3.4	229.1	−3.4	448.6	3.6	654.7	210.3	37.4
1959	1,629.1	1,612.6	16.5	716.6	700.1	16.5	236.8	8.2	463.4	8.3	681.5	231.0	45.7
1960	1,665.3	1,657.5	7.7	726.8	719.1	7.7	242.2	4.0	476.9	3.7	709.9	228.5	49.6
1961	1,708.7	1,701.4	7.3	730.2	723.0	7.3	239.2	−.1	483.7	7.3	743.0	235.4	41.1
1962	1,799.4	1,783.3	16.2	773.5	757.3	16.2	260.2	8.4	497.1	7.7	777.0	248.9	49.8
1963	1,873.3	1,856.7	16.6	797.5	780.8	16.6	273.4	7.1	507.4	9.5	811.5	264.4	54.6
1964	1,973.3	1,957.6	15.7	845.2	829.5	15.7	295.4	11.2	534.1	4.5	852.8	275.3	55.3
1965	2,087.6	2,062.4	25.2	904.0	878.8	25.2	322.2	17.4	556.5	7.8	891.6	292.0	66.9
1966	2,208.3	2,171.5	36.9	974.7	937.8	36.9	354.2	26.3	583.6	10.6	942.7	291.0	64.8
1967	2,271.4	2,242.6	28.8	993.1	964.3	28.8	363.6	14.4	600.7	14.4	990.6	287.6	58.3
1968	2,365.6	2,344.6	21.0	1,024.8	1,003.7	21.0	378.5	11.8	625.3	9.3	1,032.0	308.8	70.5
1969	2,423.3	2,398.1	25.1	1,048.5	1,023.3	25.1	389.7	15.2	633.6	9.9	1,066.9	307.9	67.6
1970	2,416.2	2,407.9	8.2	1,030.0	1,021.7	8.2	381.7	−.5	640.1	8.8	1,092.4	293.8	53.1
1971	2,484.8	2,465.2	19.6	1,037.6	1,017.9	19.6	375.5	7.1	642.4	12.5	1,126.1	321.2	69.8
1972	2,608.5	2,586.8	21.8	1,093.8	1,072.1	21.8	409.4	15.4	662.7	6.4	1,169.4	345.4	73.9
1973	2,744.1	2,704.1	40.0	1,175.0	1,135.0	40.0	474.9	30.8	660.1	9.2	1,218.7	350.4	82.0
1974	2,729.3	2,696.0	33.3	1,159.2	1,125.9	33.3	476.0	20.0	649.9	13.3	1,256.4	313.7	65.4
1975	2,695.0	2,707.8	−12.8	1,125.0	1,137.8	−12.8	471.1	−11.4	666.7	−1.4	1,286.4	283.6	61.8
1976	2,826.7	2,804.6	22.1	1,194.7	1,172.5	22.1	490.9	15.9	681.7	6.3	1,324.4	307.6	80.1
1977	2,958.6	2,929.5	29.1	1,256.2	1,227.1	29.1	534.0	14.2	693.1	14.9	1,368.7	333.7	88.7
1978	3,115.2	3,078.4	36.8	1,329.1	1,292.4	36.8	572.5	27.5	719.9	9.3	1,426.9	359.1	87.3
1979	3,192.4	3,177.4	15.0	1,354.6	1,339.6	15.0	604.6	13.3	735.1	1.7	1,478.6	359.2	80.2
1980	3,187.1	3,194.0	−6.9	1,344.2	1,351.1	−6.9	584.0	−3.2	767.1	−3.7	1,511.1	331.8	67.1
1981	3,248.8	3,225.0	23.9	1,386.0	1,362.2	23.9	578.5	6.9	783.7	16.9	1,533.4	329.4	73.3
1982	3,166.0	3,190.5	−24.5	1,319.1	1,343.7	−24.5	542.9	−16.8	800.8	−7.7	1,547.5	299.4	66.5
1983	3,277.7	3,283.1	−5.5	1,364.4	1,369.9	−5.5	562.9	−1.1	807.1	−4.4	1,584.4	328.8	86.0
1984	3,492.0	3,429.3	62.7	1,506.4	1,443.7	62.7	619.9	35.5	823.9	27.1	1,615.4	370.2	97.3
1985 p	3,573.5	3,566.2	7.3	1,537.0	1,529.6	7.3	672.0	7.2	857.6	.2	1,642.1	394.4	104.0
1982 I	3,170.4	3,194.4	−24.0	1,327.7	1,351.7	−24.0	548.5	−14.8	803.2	−9.2	1,539.9	302.8	59.0
II	3,179.9	3,185.3	−5.4	1,335.0	1,340.5	−5.4	541.6	−4.1	798.8	−1.3	1,546.2	298.6	68.5
III	3,154.5	3,164.0	−9.4	1,316.0	1,325.4	−9.4	537.7	−5.9	787.7	−3.6	1,548.3	290.3	75.3
IV	3,159.3	3,218.6	−59.3	1,297.9	1,357.1	−59.3	543.8	−42.4	813.4	−16.9	1,555.5	305.9	63.3
1983 I	3,190.6	3,232.8	−42.2	1,314.6	1,356.8	−42.2	533.5	−28.4	823.3	−13.8	1,569.1	306.9	77.9
II	3,259.3	3,263.0	−3.7	1,358.8	1,362.5	−3.7	558.6	−1.0	803.9	−2.7	1,579.5	321.0	77.7
III	3,303.4	3,302.1	1.4	1,370.1	1,368.7	1.4	567.2	12.1	801.5	−10.7	1,590.9	342.5	94.1
IV	3,357.2	3,334.6	22.6	1,414.3	1,391.6	22.6	592.2	13.0	799.4	9.7	1,598.0	345.0	94.4
1984 I	3,449.4	3,365.7	83.6	1,489.0	1,405.4	83.6	600.5	41.4	804.9	42.2	1,603.2	357.1	105.3
II	3,492.6	3,426.6	66.0	1,511.6	1,445.5	66.0	616.6	35.0	829.0	31.0	1,609.6	371.5	90.3
III	3,510.4	3,445.5	64.9	1,514.4	1,449.5	64.9	617.6	37.9	832.0	27.0	1,618.7	377.2	94.5
IV	3,515.6	3,479.5	36.1	1,510.5	1,474.4	36.1	644.8	27.9	829.6	8.2	1,630.1	375.0	99.1
1985 I	3,547.8	3,532.0	15.8	1,530.3	1,514.6	15.8	657.2	15.8	857.3	−.1	1,636.0	381.5	109.4
II	3,557.4	3,542.3	15.1	1,531.5	1,516.3	15.1	672.6	1.6	843.8	13.5	1,633.9	392.0	99.0
III	3,584.1	3,585.8	−1.8	1,541.0	1,542.7	−1.8	686.4	−6.1	856.3	4.4	1,643.4	399.7	108.4
IV p	3,605.0	3,604.8	.1	1,545.0	1,544.9	.1	672.0	17.4	872.9	−17.2	1,655.4	404.6	99.1

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-8.—*Gross national product by sector, 1929–85*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross national product	Gross domestic product										Rest of the world
		Total	Business [1]				Households and institutions	Government [2]			
			Total [1]	Nonfarm [1]	Farm	Statistical discrepancy		Total	Federal	State and local	
1929	103.9	103.2	96.0	84.9	9.7	1.5	2.9	4.4	0.9	3.5	0.8
1933	56.0	55.7	49.3	43.6	4.6	1.2	1.7	4.7	1.2	3.5	.3
1939	91.3	90.9	81.0	73.0	6.3	1.7	2.3	7.6	3.5	4.2	.4
1940	100.4	100.1	89.8	82.0	6.4	1.4	2.4	7.8	3.5	4.3	.4
1941	125.5	125.0	113.0	103.4	8.9	.7	2.5	9.5	5.1	4.4	.5
1942	159.0	158.5	140.4	128.0	13.0	−.7	2.9	15.2	10.7	4.5	.5
1943	192.7	192.3	163.4	149.8	15.3	−1.7	3.2	25.6	21.0	4.7	.4
1944	211.4	210.9	174.9	156.9	15.3	2.7	3.7	32.3	27.3	4.9	.5
1945	213.4	213.0	173.5	153.5	16.0	4.0	4.1	35.3	30.0	5.4	.4
1946	212.4	211.6	184.8	165.2	18.8	.7	4.5	22.4	16.2	6.2	.7
1947	235.2	234.1	211.3	189.3	20.2	1.8	5.1	17.6	10.3	7.3	1.2
1948	261.6	260.1	236.4	214.4	23.3	−1.3	5.6	18.1	9.6	8.5	1.5
1949	260.4	259.0	232.9	213.3	18.8	.8	5.9	20.1	10.7	9.4	1.4
1950	288.3	286.7	259.0	238.3	20.0	.8	6.5	21.2	11.1	10.1	1.5
1951	333.4	331.4	296.7	271.1	22.9	2.7	6.9	27.7	16.6	11.2	2.0
1952	351.6	349.4	310.7	286.7	22.2	1.8	7.2	31.5	19.3	12.3	2.2
1953	371.6	369.5	329.3	306.3	20.3	2.6	7.8	32.4	19.1	13.3	2.1
1954	372.5	370.3	329.1	306.7	19.7	2.7	8.1	33.0	18.3	14.7	2.2
1955	405.9	403.3	359.4	338.8	18.8	1.8	9.1	34.8	19.0	15.8	2.6
1956	428.2	425.2	378.1	361.4	18.6	−1.9	9.9	37.2	19.6	17.6	3.0
1957	451.0	447.7	397.3	380.1	18.4	−1.2	10.6	39.8	20.2	19.6	3.4
1958	456.8	453.9	399.4	378.8	20.7	−.1	11.5	43.0	21.4	21.6	2.9
1959	495.8	492.7	435.5	417.9	19.0	−1.5	12.4	44.8	21.7	23.1	3.1
1960	515.3	511.8	449.9	432.5	20.2	−2.8	13.9	48.1	22.6	25.5	3.5
1961	533.8	530.0	463.9	445.0	20.2	−1.2	14.5	51.6	23.6	27.9	3.8
1962	574.6	570.1	499.1	478.6	20.4	.0	15.6	55.4	25.2	30.2	4.5
1963	606.9	602.0	526.0	506.2	20.5	−.6	16.7	59.3	26.5	32.9	4.9
1964	649.8	644.4	562.1	544.3	19.3	−1.4	17.9	64.4	28.5	35.9	5.4
1965	705.1	699.3	610.7	590.0	21.9	−1.2	19.3	69.3	30.0	39.3	5.8
1966	772.0	766.3	666.7	641.7	22.8	2.1	21.3	78.4	34.3	44.1	5.6
1967	816.4	810.4	699.7	677.8	22.2	−.4	23.4	87.4	37.8	49.5	6.0
1968	892.7	885.9	762.0	740.4	22.7	−1.1	26.1	97.8	41.9	55.9	6.8
1969	963.9	957.1	820.1	798.8	25.2	−3.9	29.5	107.5	44.9	62.6	6.8
1970	1,015.5	1,008.2	856.3	831.2	26.3	−1.1	32.4	119.5	48.4	71.1	7.3
1971	1,102.7	1,093.4	927.4	897.5	28.1	1.8	35.6	130.3	51.1	79.3	9.3
1972	1,212.8	1,201.6	1,020.0	988.8	32.6	−1.6	39.0	142.6	54.9	87.7	11.2
1973	1,359.3	1,343.1	1,145.0	1,098.3	51.0	−4.3	43.0	155.0	57.1	97.9	16.2
1974	1,472.8	1,453.3	1,237.5	1,190.0	49.2	−1.7	47.2	168.7	61.1	107.6	19.5
1975	1,598.4	1,580.9	1,341.2	1,288.4	50.3	2.5	52.0	187.7	66.5	121.1	17.5
1976	1,782.8	1,761.7	1,500.7	1,448.7	48.5	3.6	57.1	203.8	70.9	132.9	21.1
1977	1,990.5	1,965.1	1,682.1	1,631.7	50.4	.0	62.4	220.5	75.5	145.0	25.4
1978	2,249.7	2,219.1	1,908.4	1,850.0	60.3	−1.9	70.2	240.5	81.7	158.9	30.5
1979	2,508.2	2,464.4	2,125.3	2,054.5	71.8	−1.0	78.6	260.4	86.9	173.5	43.8
1980	2,732.0	2,684.4	2,306.8	2,236.4	65.5	4.9	89.3	288.3	96.1	192.2	47.6
1981	3,052.6	3,000.5	2,582.8	2,498.9	79.8	4.1	101.0	316.7	107.4	209.3	52.1
1982	3,166.0	3,114.8	2,658.2	2,581.3	77.0	−.1	112.7	343.9	117.0	226.9	51.2
1983	3,401.6	3,350.9	2,862.1	2,802.0	60.8	−.6	122.4	366.4	124.6	241.8	50.7
1984	3,774.7	3,726.7	3,203.1	3,124.4	80.2	−1.5	131.9	391.7	132.1	259.6	48.0
1985 p	3,992.5	3,951.8	3,392.0	3,322.0	69.2	.7	140.8	419.0	139.8	279.2	40.7
1982: I	3,112.6	3,062.3	2,618.9	2,548.8	74.9	−4.8	108.5	334.9	114.4	220.5	50.3
II	3,159.5	3,105.9	2,653.2	2,575.9	76.2	1.0	111.2	341.5	116.0	225.5	53.6
III	3,178.4	3,127.4	2,667.1	2,592.7	77.7	−3.2	114.5	345.8	116.9	228.9	51.0
IV	3,212.5	3,163.8	2,693.6	2,607.7	79.0	6.8	116.9	353.4	120.7	232.6	48.7
1983: I	3,268.7	3,219.3	2,740.7	2,670.6	71.5	−1.4	118.9	359.7	123.1	236.5	49.4
II	3,365.1	3,316.1	2,830.9	2,767.2	59.4	4.3	121.0	364.2	124.3	239.9	49.0
III	3,437.5	3,384.7	2,892.5	2,842.5	54.3	−4.3	123.7	368.5	125.0	243.4	52.8
IV	3,535.0	3,483.5	2,984.2	2,927.6	57.8	−1.2	126.0	373.3	125.9	247.4	51.5
1984: I	3,676.5	3,625.0	3,112.6	3,027.3	82.5	2.8	128.9	383.6	130.8	252.8	51.5
II	3,757.5	3,712.5	3,192.6	3,112.6	81.9	−1.9	131.1	388.9	131.6	257.3	45.0
III	3,812.2	3,763.7	3,236.7	3,157.3	78.6	.8	132.8	394.3	132.5	261.8	48.5
IV	3,852.5	3,805.6	3,270.6	3,200.7	77.6	−7.6	134.9	400.0	133.5	266.5	46.9
1985: I	3,917.5	3,874.7	3,327.8	3,251.3	74.0	2.5	136.9	410.0	138.3	271.7	42.8
II	3,960.6	3,920.4	3,365.5	3,301.5	68.7	−4.7	139.3	415.6	139.0	276.6	40.2
III	4,016.9	3,977.2	3,414.2	3,346.9	64.7	2.5	141.9	421.2	139.5	281.6	39.6
IV p	4,075.1	4,034.9	3,460.4	3,388.3	69.5	2.5	145.2	429.3	142.5	286.9	40.2

[1] Includes compensation of employees in government enterprises.

[2] Compensation of government employees.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–9.—*Gross national product by sector in 1982 dollars, 1929–85*

[Billions of 1982 dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross national product	Gross domestic product										Rest of the world
		Total	Business [1]				Households and institutions	Government [2]				
			Total [1]	Nonfarm [1]	Farm	Statistical discrepancy		Total	Federal	State and local		
1929	709.6	704.6	611.6	547.8	54.1	9.7	34.4	58.6	13.2	45.3		4.9
1933	498.5	496.1	404.9	338.7	56.6	9.6	27.1	64.0	16.2	47.9		2.4
1939	716.6	713.5	586.8	518.3	56.4	12.1	33.3	93.4	38.9	54.6		3.1
1940	772.9	770.3	635.5	571.2	54.6	9.7	35.8	99.0	44.1	55.0		2.6
1941	909.4	906.0	738.7	675.8	58.1	4.8	35.8	131.5	76.2	55.3		3.4
1942	1,080.3	1,077.1	832.9	774.4	62.4	−4.0	36.9	207.4	152.9	54.4		3.1
1943	1,276.2	1,273.4	891.6	841.6	59.2	−9.2	34.3	347.6	294.6	52.9		2.7
1944	1,380.6	1,377.7	934.3	862.5	57.2	14.6	34.3	409.1	357.5	51.7		2.9
1945	1,354.8	1,352.6	914.3	839.3	53.7	21.3	34.4	403.8	350.7	53.2		2.3
1946	1,096.9	1,093.3	866.3	809.0	54.0	3.3	35.4	191.6	135.0	56.6		3.6
1947	1,066.7	1,061.6	886.1	828.6	49.9	7.6	37.9	137.7	76.7	61.0		5.1
1948	1,108.7	1,102.5	925.4	875.1	55.2	−4.9	41.2	135.8	73.2	62.6		6.2
1949	1,109.0	1,103.4	916.7	858.5	55.0	3.2	42.4	144.2	77.1	67.1		5.6
1950	1,203.7	1,197.4	1,002.8	941.4	58.3	3.1	45.0	149.6	80.3	69.3		6.2
1951	1,328.2	1,320.3	1,080.5	1,014.9	56.0	9.7	46.1	193.7	122.8	71.0		7.9
1952	1,380.0	1,371.7	1,114.7	1,050.9	57.2	6.5	46.2	210.7	137.5	73.3		8.3
1953	1,435.3	1,427.4	1,170.0	1,101.3	59.3	9.4	47.7	209.7	133.2	76.5		7.9
1954	1,416.2	1,407.8	1,154.6	1,084.2	60.9	9.5	48.4	204.8	125.0	79.8		8.4
1955	1,494.9	1,485.5	1,229.7	1,161.5	62.0	6.2	53.2	202.6	119.2	83.4		9.4
1956	1,525.6	1,515.0	1,254.1	1,199.6	60.7	−6.2	56.1	204.8	116.1	88.7		10.7
1957	1,551.1	1,539.7	1,274.0	1,219.0	58.8	−3.8	57.7	208.0	114.5	93.5		11.5
1958	1,539.2	1,529.7	1,260.4	1,199.7	61.2	−.5	60.7	208.6	109.5	99.2		9.5
1959	1,629.1	1,619.1	1,345.8	1,291.6	58.8	−4.6	62.7	210.6	107.5	103.1		10.0
1960	1,665.3	1,654.1	1,369.7	1,317.2	61.1	−8.7	67.4	217.1	108.9	108.2		11.1
1961	1,708.7	1,696.6	1,403.2	1,346.7	60.2	−3.7	68.0	225.4	111.5	113.9		12.1
1962	1,799.4	1,785.6	1,480.9	1,421.1	59.8	.1	70.7	233.9	116.7	117.3		13.9
1963	1,873.3	1,858.5	1,546.7	1,488.7	59.8	−1.8	72.5	239.2	116.1	123.1		14.9
1964	1,973.3	1,957.1	1,635.2	1,581.6	57.7	−4.1	74.6	247.3	116.8	130.5		16.1
1965	2,087.6	2,070.6	1,737.4	1,681.8	59.0	−3.4	77.4	255.8	117.3	138.5		17.0
1966	2,208.3	2,192.5	1,837.1	1,776.5	54.7	5.9	80.4	275.0	128.1	146.9		15.9
1967	2,271.4	2,255.0	1,880.9	1,824.2	57.7	−1.0	83.1	291.0	138.5	152.4		16.3
1968	2,365.6	2,347.9	1,961.1	1,908.3	55.7	−2.8	85.6	301.2	140.7	160.5		17.7
1969	2,423.3	2,406.2	2,009.8	1,962.1	57.2	−9.5	88.2	308.2	141.0	167.2		17.0
1970	2,416.2	2,399.1	2,004.4	1,946.4	60.7	−2.7	87.0	307.7	133.2	174.5		17.1
1971	2,484.8	2,464.1	2,068.0	2,001.4	62.3	4.2	88.8	307.4	125.5	181.9		20.7
1972	2,608.5	2,584.9	2,186.6	2,128.0	62.0	−3.4	91.2	307.1	118.3	188.8		23.7
1973	2,744.1	2,711.8	2,309.1	2,256.6	61.1	−8.6	93.4	309.3	113.6	195.7		32.2
1974	2,729.3	2,693.5	2,283.9	2,226.5	60.7	−3.3	93.9	315.7	113.5	202.1		35.9
1975	2,695.0	2,665.7	2,249.6	2,180.6	64.8	4.2	96.4	319.6	112.8	206.8		29.3
1976	2,826.7	2,793.7	2,374.8	2,306.6	62.5	5.6	97.0	321.9	112.7	209.2		33.0
1977	2,958.6	2,921.2	2,497.2	2,434.9	62.2	.1	98.0	326.0	112.7	213.3		37.4
1978	3,115.2	3,073.0	2,639.2	2,581.0	61.0	−2.8	101.0	332.8	113.9	219.0		42.1
1979	3,192.4	3,136.6	2,696.4	2,633.2	64.6	−1.4	103.7	336.5	113.0	223.5		55.7
1980	3,187.1	3,131.7	2,683.2	2,613.1	64.2	5.9	107.3	341.2	114.4	226.8		55.5
1981	3,248.8	3,193.6	2,739.8	2,659.6	75.7	4.4	109.9	343.9	115.8	228.1		55.2
1982	3,166.0	3,114.8	2,658.2	2,581.3	77.0	−.1	112.7	343.9	117.0	226.9		51.2
1983	3,277.7	3,228.9	2,769.4	2,707.4	62.6	−.6	114.5	345.0	118.7	226.3		48.8
1984	3,492.0	3,447.5	2,982.1	2,912.3	71.2	−1.4	116.9	348.5	120.3	228.2		44.5
1985 ᵖ	3,573.5	3,537.0	3,065.8	2,991.9	73.3	.6	120.2	351.0	121.6	229.5		36.5
1982: I	3,170.4	3,119.2	2,663.8	2,591.8	76.9	−4.9	111.4	344.0	116.4	227.6		51.2
II	3,179.9	3,125.9	2,668.9	2,593.2	74.7	1.0	112.4	344.6	116.8	227.7		54.0
III	3,154.5	3,102.9	2,646.0	2,573.2	76.0	−3.2	113.4	343.6	117.3	226.3		51.6
IV	3,159.3	3,111.3	2,654.1	2,567.1	80.3	6.7	113.8	343.5	117.6	225.9		48.0
1983: I	3,190.6	3,142.3	2,684.1	2,612.0	73.5	−1.4	113.9	344.4	118.6	225.8		48.2
II	3,259.3	3,212.0	2,753.4	2,683.6	65.6	4.2	114.0	344.6	118.7	225.9		47.4
III	3,303.4	3,252.7	2,792.8	2,743.2	53.8	−4.1	114.8	345.1	118.8	226.3		50.7
IV	3,357.2	3,308.3	2,847.2	2,790.7	57.7	−1.1	115.4	345.7	118.7	227.0		48.9
1984: I	3,449.4	3,401.1	2,938.4	2,867.5	68.3	2.6	115.7	347.0	119.5	227.4		48.3
II	3,492.6	3,450.7	2,986.0	2,916.4	71.4	−1.8	116.7	347.9	120.0	227.9		42.0
III	3,510.4	3,465.6	2,999.4	2,925.9	72.8	.7	117.1	349.1	120.6	228.5		44.8
IV	3,515.6	3,472.6	3,004.6	2,939.2	72.5	−7.0	118.1	349.9	121.0	228.9		43.0
1985: I	3,547.8	3,508.9	3,039.9	2,964.6	73.0	2.3	118.5	350.4	121.4	229.1		38.9
II	3,557.4	3,521.2	3,051.1	2,981.8	73.5	−4.2	119.4	350.7	121.5	229.2		36.2
III	3,584.1	3,548.6	3,076.7	3,000.8	73.7	2.3	120.5	351.4	121.7	229.7		35.4
IV ᵖ	3,605.0	3,569.4	3,095.5	3,020.2	73.0	2.3	122.2	351.6	121.8	229.9		35.6

[1] Includes compensation of employees in government enterprises.

[2] Compensation of government employees.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-10.—*Gross national product by industry, 1947–84*

[Billions of dollars]

Year	Gross national product	Gross domestic product												Rest of the world
		Agriculture, forestry, and fisheries	Mining	Construction	Manufacturing			Transportation and public utilities	Wholesale and retail trade	Finance, insurance, and real estate	Services	Government and government enterprises	Statistical discrepancy	
					Total	Durable goods	Nondurable goods							
1947	235.2	20.8	6.8	9.1	66.2	33.5	32.7	21.0	44.2	23.8	20.2	20.2	1.8	1.2
1948	261.6	24.0	9.4	11.5	74.7	38.2	36.6	23.7	48.5	26.9	21.9	20.8	-1.3	1.5
1949	260.4	19.5	8.1	11.5	72.2	37.1	35.0	23.9	48.0	29.2	22.6	23.2	.8	1.4
1950	288.3	20.8	9.3	13.2	84.0	45.9	38.1	26.6	51.5	32.2	24.2	24.2	.8	1.5
1951	333.4	23.9	10.2	15.6	99.0	55.5	43.4	30.2	56.8	35.5	26.4	31.2	2.7	2.0
1952	351.6	23.2	10.2	16.9	103.3	59.0	44.3	32.2	58.9	39.1	28.1	35.7	1.8	2.2
1953	371.6	21.4	10.7	17.5	112.5	66.1	46.4	34.2	60.4	43.3	30.2	36.8	2.6	2.1
1954	372.5	20.8	11.0	17.7	106.7	61.0	45.7	33.8	61.6	47.0	31.6	37.4	2.7	2.2
1955	405.9	20.0	12.5	19.1	121.3	70.8	50.4	36.8	67.1	50.7	35.1	39.0	1.8	2.6
1956	428.2	19.8	13.6	21.3	127.2	73.9	53.3	39.6	71.3	54.3	38.7	41.2	-1.9	3.0
1957	451.0	19.6	13.7	22.2	131.8	78.0	53.8	41.7	75.0	58.5	41.7	44.5	-1.2	3.4
1958	456.8	22.1	12.6	21.8	124.3	70.0	54.3	41.9	76.4	63.1	44.0	47.8	-.1	2.9
1959	495.8	20.4	12.5	23.7	141.8	81.6	60.3	45.1	83.3	68.2	48.3	50.8	-1.5	3.1
1960	515.3	21.7	12.8	24.3	144.4	82.5	61.9	47.3	85.7	72.8	51.4	54.2	-2.8	3.5
1961	533.8	21.8	12.9	25.3	145.0	81.6	63.3	48.9	88.0	76.9	54.8	57.6	-1.2	3.8
1962	574.6	22.3	13.1	27.1	158.6	91.9	66.8	51.9	94.1	81.7	59.2	62.1	.0	4.5
1963	606.9	22.3	13.4	28.9	168.1	98.0	70.1	54.8	98.3	86.5	63.3	67.0	-.6	4.9
1964	649.8	21.4	13.8	31.6	180.2	105.7	74.5	58.3	107.1	92.0	69.0	72.5	-1.4	5.4
1965	705.1	24.2	14.0	34.7	198.4	118.4	80.0	62.6	114.9	98.9	74.6	78.2	-1.2	5.8
1966	772.0	25.3	14.6	37.9	217.4	130.8	86.6	67.4	124.1	106.9	82.5	88.1	2.1	5.6
1967	816.4	24.9	15.2	39.7	222.9	133.7	89.2	70.7	133.0	115.6	90.6	98.4	-.4	6.0
1968	892.7	25.7	16.2	43.5	243.6	146.1	97.5	76.4	146.8	125.1	99.1	110.5	-1.1	6.8
1969	963.9	28.6	17.1	48.7	257.1	154.2	102.9	82.6	159.2	136.3	110.4	121.0	-3.9	6.8
1970	1,015.5	29.9	18.7	51.4	252.3	145.9	106.3	88.4	168.7	145.8	120.2	134.0	-1.1	7.3
1971	1,102.7	32.2	18.8	56.5	265.7	153.8	111.9	97.1	183.8	161.4	130.2	145.9	1.8	9.3
1972	1,212.8	37.4	20.2	63.0	292.5	172.6	119.9	108.0	202.5	174.8	144.6	160.1	-1.6	11.2
1973	1,359.3	56.2	23.4	70.4	326.4	195.4	131.0	118.7	225.6	190.5	163.2	173.1	-4.3	16.2
1974	1,472.8	55.0	36.9	74.5	338.5	201.7	136.7	129.1	246.0	206.7	179.4	189.0	-1.7	19.5
1975	1,598.4	56.3	41.3	76.5	357.3	206.3	151.0	141.7	273.7	221.7	199.8	210.1	2.5	17.5
1976	1,782.8	55.7	46.0	86.2	409.3	239.7	169.7	160.4	299.7	246.1	224.9	229.7	3.6	21.1
1977	1,990.5	58.9	50.2	97.9	465.3	277.7	187.7	178.9	332.8	280.3	253.4	247.4	-.0	25.4
1978	2,249.7	70.1	56.5	115.6	518.8	317.4	201.4	201.0	373.4	326.3	289.1	270.3	-1.9	30.5
1979	2,508.2	83.1	72.7	131.4	561.8	345.2	216.5	216.1	415.8	363.3	328.7	292.4	-1.0	43.8
1980	2,732.0	77.2	107.3	137.7	581.0	351.8	229.2	240.8	438.9	400.6	374.0	322.1	4.9	47.6
1981	3,052.6	92.0	143.7	138.4	643.1	385.8	257.3	269.6	483.1	449.3	422.6	354.7	4.1	52.1
1982	3,166.0	89.6	132.1	140.9	634.6	362.5	272.1	288.4	506.5	475.1	463.6	383.9	-.1	51.2
1983	3,401.6	75.8	115.5	150.0	692.5	390.7	301.8	312.8	548.4	531.2	514.7	410.7	-.6	50.7
1984	3,774.7	95.2	121.2	167.7	779.8	454.1	325.7	345.3	620.2	579.9	575.5	443.4	-1.5	48.0

Note.—The industry classification is on an establishment basis and is based on the 1972 Standard Industrial Classification.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-11.—*Gross national product by industry in 1982 dollars, 1947–84*

[Billions of 1982 dollars]

Year	Gross national product	Gross domestic product													Rest of the world
		Agriculture, forestry, and fisheries	Mining	Construction	Manufacturing			Transportation and public utilities	Wholesale and retail trade	Finance, insurance, and real estate	Services	Government and government enterprises	Statistical discrepancy	Residual [1]	
					Total	Durable goods	Nondurable goods								
1947	1,066.7	55.6	67.6	76.7	226.1	138.1	88.0	100.0	157.8	103.0	124.7	156.2	7.6	−13.6	5.1
1948	1,108.7	61.3	72.4	90.0	238.5	145.0	93.5	98.7	161.9	107.7	128.9	155.5	−4.9	−7.5	6.2
1949	1,109.0	61.0	65.7	89.4	226.3	133.2	93.1	90.7	166.1	112.2	128.9	164.0	3.2	−4.2	5.6
1950	1,203.7	64.3	72.8	100.0	257.7	156.7	101.0	95.3	182.1	119.7	133.8	169.2	3.1	−.6	6.2
1951	1,328.2	62.6	80.8	110.9	288.4	181.4	107.0	104.9	183.8	126.4	136.9	214.0	9.7	2.0	7.9
1952	1,380.0	64.2	81.5	115.9	298.2	190.6	107.6	104.5	189.5	134.7	139.4	231.9	6.5	5.3	8.3
1953	1,435.3	66.3	84.3	119.9	319.9	208.4	111.5	106.7	195.6	142.2	142.7	230.9	9.4	9.4	7.9
1954	1,416.2	68.2	83.3	124.8	296.6	185.8	110.8	104.1	197.1	149.5	145.9	225.4	9.5	3.5	8.4
1955	1,494.9	69.1	92.0	133.3	327.7	208.5	119.2	112.3	215.0	160.2	153.0	223.4	6.2	−6.6	9.4
1956	1,525.7	67.8	96.5	142.7	330.6	207.3	123.3	117.7	221.4	168.8	161.1	225.6	−6.2	−11.1	10.7
1957	1,551.1	65.9	96.2	142.4	332.5	208.7	123.8	119.9	225.1	178.3	168.6	229.2	−3.8	−14.7	11.5
1958	1,539.3	68.3	89.1	147.5	303.5	180.1	123.4	116.1	225.0	184.5	174.3	230.1	−.5	−8.1	9.5
1959	1,629.1	65.8	94.1	160.4	338.0	203.0	135.0	123.5	240.7	195.9	183.5	232.8	−4.6	−11.0	10.0
1960	1,665.3	68.3	94.2	163.1	338.7	202.4	136.3	127.8	245.4	206.5	190.2	240.3	−8.7	−11.6	11.1
1961	1,708.7	67.5	95.6	165.1	339.4	199.9	139.5	130.0	247.7	215.0	197.7	249.2	−3.7	−6.9	12.1
1962	1,799.4	67.1	98.1	172.5	368.3	220.5	147.8	136.3	263.9	226.5	207.7	258.4	.1	−13.3	13.9
1963	1,873.3	67.2	102.2	177.5	397.4	238.9	158.5	143.8	273.8	235.9	217.4	264.5	−1.8	−19.7	14.9
1964	1,973.3	65.2	105.7	185.9	425.4	259.3	166.2	150.4	290.7	245.8	230.7	274.0	−4.1	−12.6	16.1
1965	2,087.6	66.7	109.4	193.7	462.5	286.9	175.6	161.5	309.8	259.8	240.4	284.3	−3.4	−14.0	17.0
1966	2,208.3	62.4	115.0	194.4	497.9	312.3	185.6	174.2	326.5	271.1	253.9	305.5	5.9	−14.5	15.9
1967	2,271.4	65.4	120.2	190.7	496.6	311.9	184.7	178.1	335.3	282.4	265.2	322.3	−1.0	−.2	16.3
1968	2,365.6	63.6	124.7	190.2	522.0	326.2	195.8	189.5	354.8	296.0	274.7	332.6	−2.8	2.8	17.7
1969	2,423.3	65.3	128.9	183.6	536.7	334.0	202.6	200.3	361.7	314.0	287.8	340.2	−9.5	−2.7	17.0
1970	2,416.2	68.8	134.5	168.0	506.8	304.8	202.0	203.9	367.6	320.7	295.7	339.6	−2.7	−3.9	17.1
1971	2,484.8	70.6	132.4	162.7	515.5	305.5	210.0	209.8	385.7	335.9	302.4	340.0	4.2	4.8	20.7
1972	2,608.5	70.9	134.4	166.7	561.2	336.5	224.8	223.8	414.8	350.9	320.0	340.5	−3.4	5.1	23.7
1973	2,744.0	70.3	133.4	170.4	621.3	377.0	244.3	243.0	437.0	367.7	340.2	343.4	−8.6	−6.2	32.2
1974	2,729.4	69.7	130.3	162.3	591.6	363.5	228.1	248.8	426.2	381.6	347.5	350.6	−3.3	−11.8	35.9
1975	2,695.0	73.1	125.6	149.4	547.5	325.2	222.2	246.4	433.1	387.6	352.4	355.0	4.2	−8.7	29.3
1976	2,826.7	71.5	124.4	158.1	600.6	357.4	243.2	257.1	454.4	403.1	367.7	357.7	5.6	−6.6	33.0
1977	2,958.6	71.6	126.2	165.1	645.0	386.2	258.9	268.5	479.2	417.7	388.4	362.9	.1	−3.4	37.4
1978	3,115.2	71.8	128.8	176.7	683.4	415.9	267.5	284.8	502.4	442.5	411.9	371.5	−2.8	2.1	42.1
1979	3,192.3	76.1	130.0	173.5	697.1	423.5	273.5	293.4	511.7	459.2	429.8	376.2	−1.4	−9.0	55.7
1980	3,187.2	76.2	135.6	161.6	665.4	401.5	263.9	293.4	500.4	464.3	442.6	382.7	5.9	3.5	55.5
1981	3,248.8	88.0	139.8	147.4	676.1	404.9	271.2	296.2	507.3	474.2	462.5	385.3	4.4	12.5	55.2
1982	3,166.0	89.6	132.1	140.9	634.6	362.5	272.1	288.4	506.5	475.1	463.6	383.9	−.1	.0	51.2
1983	3,277.7	75.8	125.4	147.8	680.9	394.5	286.3	294.2	536.0	488.6	485.1	386.1	−.6	9.6	48.8
1984	3,492.0	85.0	133.0	156.7	760.7	462.0	298.6	312.8	584.7	512.6	509.5	390.7	−1.4	3.2	44.5

[1] Equals GNP in constant dollars measured as the sum of incomes less GNP in constant dollars measured as the sum of gross product by industry.

Note.—The industry classification is on an establishment basis and is based on the 1972 Standard Industrial Classification.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-12.—*Gross domestic product of nonfinancial corporate business, 1929–85*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross domestic product of nonfinancial corporate business	Capital consumption allowances with capital consumption adjustment	Net domestic product												
			Total	Indirect business tax, etc.[1]	Domestic income										
					Total	Compensation of employees	Corporate profits with inventory valuation and capital consumption adjustments								Net interest
							Total	Profits					Inventory valuation adjustment	Capital consumption adjustment	
								Profits before tax	Profits tax liability	Profits after tax					
										Total	Dividends	Undistributed profits			
1929	50.4	5.3	45.1	3.4	41.8	32.3	8.0	8.4	1.2	7.3	5.1	2.2	0.5	-0.9	1.4
1933	24.6	4.2	20.4	3.8	16.5	16.7	-1.9	.6	.5	.1	2.0	-1.9	-2.1	-.3	1.7
1939	44.0	4.8	39.1	5.1	34.1	28.2	4.4	6.1	1.4	4.7	3.3	1.4	-.7	-1.0	1.5
1940	50.6	5.0	45.6	5.5	40.2	31.2	7.6	8.8	2.7	6.1	3.5	2.6	-.2	-1.0	1.4
1941	65.9	5.4	60.5	6.4	54.1	39.8	13.0	16.4	7.5	9.0	3.9	5.0	-2.5	-1.0	1.3
1942	83.3	6.0	77.3	6.8	70.5	51.0	18.2	20.1	11.2	8.9	3.7	5.2	-1.2	-.7	1.3
1943	99.1	6.1	93.0	7.3	85.7	62.2	22.4	23.6	13.8	9.8	3.9	5.8	-.8	-.4	1.1
1944	102.6	6.2	96.4	8.1	88.3	65.1	22.2	22.2	12.6	9.6	4.1	5.6	-.3	.3	1.0
1945	95.8	6.3	89.5	8.9	80.6	61.9	17.7	17.8	10.2	7.6	4.1	3.5	-.6	.5	1.0
1946	99.8	7.4	92.4	10.1	82.3	67.2	14.4	22.0	8.6	13.4	4.8	8.6	-5.3	-2.3	.7
1947	121.2	9.0	112.2	11.9	100.3	79.1	20.4	29.1	10.8	18.3	5.5	12.8	-5.9	-2.8	0.8
1948	138.9	10.5	128.4	13.2	115.2	87.7	26.6	31.8	11.8	20.0	6.0	14.0	-2.2	-3.0	.9
1949	135.2	11.2	123.9	13.9	110.1	85.2	23.9	24.9	9.3	15.6	6.0	9.6	1.9	-2.9	1.0
1950	153.6	12.1	141.5	15.3	126.2	94.7	30.6	38.5	16.9	21.6	7.5	14.1	-5.0	-2.9	.9
1951	176.3	13.9	162.4	16.5	146.0	110.2	34.7	39.1	21.2	17.9	7.1	10.8	-1.2	-3.2	1.1
1952	184.0	14.9	169.1	18.0	151.1	118.2	31.7	33.8	17.8	16.0	7.1	8.8	1.0	-3.0	1.2
1953	196.6	15.9	180.7	19.2	161.5	128.6	31.5	34.9	18.5	16.4	7.3	9.1	-1.0	-2.4	1.3
1954	193.5	16.8	176.7	18.6	158.1	126.4	30.1	32.1	15.6	16.4	7.4	9.0	-.3	-1.6	1.6
1955	218.5	17.9	200.7	20.6	180.0	138.4	40.0	42.0	20.2	21.8	8.5	13.4	-1.7	-.3	1.6
1956	233.6	20.1	213.5	22.4	191.1	151.3	38.1	41.8	20.1	21.8	9.0	12.7	-2.7	-1.1	1.8
1957	244.1	22.1	221.9	23.7	198.2	159.0	37.0	39.8	19.1	20.7	9.3	11.4	-1.5	-1.2	2.2
1958	238.0	23.2	214.8	24.1	190.7	155.8	32.2	33.7	16.2	17.5	9.3	8.2	-.3	-1.2	2.7
1959	267.1	24.3	242.8	26.2	216.7	171.5	42.1	43.1	20.7	22.4	10.0	12.4	-.3	-.8	3.1
1960	277.6	25.3	252.4	28.5	223.9	181.2	39.2	39.7	19.2	20.5	10.6	9.9	-.2	-.2	3.5
1961	285.2	26.0	259.1	29.8	229.4	185.3	40.1	39.5	19.5	20.1	10.6	9.5	.3	.3	4.0
1962	311.1	27.0	284.2	32.2	252.0	200.1	47.3	44.2	20.6	23.5	11.4	12.2	0	3.1	4.5
1963	331.1	28.2	303.0	34.2	268.7	211.1	52.8	48.9	22.8	26.2	12.6	13.5	.1	3.9	4.8
1964	357.7	29.6	328.0	36.8	291.2	226.7	59.3	55.4	24.0	31.4	13.7	17.7	-.5	4.4	5.3
1965	392.7	31.6	361.1	39.4	321.7	246.5	69.1	65.2	27.2	38.0	15.6	22.4	-1.2	5.2	6.1
1966	430.2	34.5	395.7	40.7	355.0	274.0	73.7	70.3	29.5	40.8	16.8	24.0	-2.1	5.5	7.4
1967	452.6	37.8	414.8	43.3	371.5	292.3	70.5	66.5	27.8	38.6	17.5	21.2	-1.6	5.5	8.8
1968	499.7	41.7	458.0	49.9	408.1	323.2	74.8	73.1	33.6	39.5	19.1	20.4	-3.7	5.3	10.1
1969	542.2	45.7	496.6	54.9	441.6	358.8	69.6	69.6	33.3	36.2	19.1	17.1	-5.9	5.9	13.2
1970	560.4	50.2	510.2	59.0	451.2	378.7	55.4	57.0	27.2	29.8	18.5	11.3	-6.6	5.0	17.1
1971	605.1	55.1	550.0	64.7	485.3	402.0	65.2	65.6	29.9	35.6	18.5	17.1	-4.6	4.2	18.1
1972	671.8	60.5	611.3	69.4	541.9	447.1	75.7	76.8	33.8	43.0	20.1	22.9	-6.6	5.5	19.2
1973	753.0	65.6	687.4	76.5	610.8	505.9	82.4	96.9	40.2	56.7	21.1	35.6	-20.0	5.6	22.5
1974	812.8	76.8	736.0	81.5	654.5	556.8	69.4	107.2	42.2	65.0	21.7	43.3	-39.5	1.7	28.3
1975	881.5	92.5	789.0	88.3	700.7	580.4	91.6	109.2	41.5	67.7	24.8	42.9	-11.0	-6.6	28.7
1976	995.5	103.0	892.5	95.4	797.1	656.3	113.3	138.3	53.0	85.4	27.8	57.6	-14.9	-10.2	27.5
1977	1,126.1	115.1	1,010.9	104.4	906.5	741.0	134.9	160.5	59.9	100.6	32.0	68.6	-16.6	-9.0	30.6
1978	1,274.1	130.8	1,143.3	114.1	1,029.2	847.4	146.0	182.1	67.1	115.0	37.2	77.8	-25.3	-10.9	35.9
1979	1,417.4	150.7	1,266.7	122.1	1,144.7	962.0	139.1	195.8	69.6	126.2	39.3	86.9	-43.2	-13.5	43.5
1980	1,540.8	172.5	1,368.2	138.5	1,229.7	1,051.1	123.1	181.8	67.0	114.8	45.5	69.3	-43.1	-15.5	55.5
1981	1,738.4	200.2	1,538.1	165.9	1,372.3	1,160.5	144.2	181.5	63.9	117.6	53.4	64.2	-24.2	-13.1	67.5
1982	1,782.2	223.0	1,559.3	166.9	1,392.4	1,203.9	111.9	129.7	46.3	83.4	59.7	23.7	-10.4	-7.5	76.6
1983	1,915.9	232.1	1,683.8	182.5	1,501.3	1,267.3	160.6	151.5	57.0	94.5	66.5	28.0	-10.0	19.0	73.4
1984	2,153.1	242.5	1,910.6	202.2	1,708.4	1,401.6	221.1	186.3	71.7	114.6	72.1	42.5	-5.4	40.3	85.7
1985 p	2,283.3	253.7	2,029.7	213.3	1,816.3	1,488.4	242.3	172.6	62.0	110.6	76.6	34.0	-.4	70.0	85.6
1982: I	1,777.4	216.1	1,561.3	165.3	1,396.0	1,198.0	118.6	138.8	49.4	89.4	57.8	31.5	-7.7	-12.4	79.3
II	1,783.2	220.9	1,562.3	165.3	1,397.0	1,203.3	113.6	133.1	47.8	85.3	57.9	27.4	-10.3	-9.3	80.2
III	1,789.0	225.1	1,563.8	167.2	1,396.7	1,207.8	115.2	130.6	46.9	83.7	60.9	22.8	-10.0	-5.4	73.6
IV	1,779.4	229.7	1,549.7	169.7	1,379.9	1,206.5	100.1	116.3	41.0	75.4	62.2	13.2	-13.4	-2.8	73.4
1983: I	1,820.0	229.3	1,590.7	171.6	1,419.1	1,222.7	124.8	117.6	40.9	76.7	68.5	8.2	-3.4	10.6	71.6
II	1,884.9	230.4	1,654.4	181.8	1,472.6	1,249.5	151.9	145.4	55.1	90.3	68.0	22.4	-9.3	15.9	71.3
III	1,946.5	233.8	1,712.7	187.3	1,525.4	1,277.7	173.1	170.2	66.0	104.1	69.5	34.6	-18.1	21.0	74.7
IV	2,012.2	234.9	1,777.3	189.3	1,588.0	1,319.5	192.5	172.8	65.9	106.9	59.9	47.0	-8.9	28.7	75.9
1984: I	2,088.0	237.7	1,850.3	195.6	1,654.6	1,362.3	213.2	193.2	76.9	116.3	69.6	46.6	-13.0	33.0	79.2
II	2,147.0	241.0	1,906.0	201.8	1,704.2	1,392.4	227.2	197.5	78.4	119.1	72.5	46.6	-5.6	35.3	84.5
III	2,172.5	244.2	1,928.3	204.6	1,723.6	1,414.6	220.0	177.4	66.1	111.3	72.7	38.6	-1.3	43.9	89.0
IV	2,205.2	247.1	1,958.0	206.7	1,751.3	1,437.2	224.1	176.9	65.3	111.6	73.6	38.0	-1.6	48.8	90.1
1985: I	2,237.0	249.3	1,987.7	208.2	1,779.5	1,460.1	229.8	169.6	60.9	108.6	71.7	37.0	.7	59.6	89.6
II	2,265.8	251.5	2,014.3	214.2	1,800.1	1,480.6	232.2	164.6	58.0	106.6	83.1	23.5	2.2	65.4	87.3
III	2,301.6	255.2	2,046.4	214.8	1,831.6	1,494.7	253.1	174.5	63.3	111.2	75.0	36.1	4.7	73.9	83.8
IV p		258.7		216.2		1,518.2					76.8		-9.0	81.1	81.8

[1] Indirect business tax and nontax liability plus business transfer payments less subsidies.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–13.—*Output, costs, and profits of nonfinancial corporate business, 1948–85*

[Quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross domestic product of nonfinancial corporate business (billions of dollars)		Current-dollar cost and profit per unit of output (dollars) [1]								Output per hour of all employees (1982 dollars)	Compensation per hour of all employees (dollars)
			Total cost and profit [2]	Capital consumption allowances with capital consumption adjustment	Indirect business tax, etc. [3]	Compensation of employees	Corporate profits with inventory valuation and capital consumption adjustments			Net interest		
	Current dollars	1982 dollars					Total	Profits tax liability	Profits after tax [4]			
1948	138.9	538.9	0.258	0.019	0.025	0.163	0.049	0.022	0.027	0.002	…	…
1949	135.2	515.7	.262	.022	.027	.165	.046	.018	.028	.002	…	…
1950	153.6	570.4	.269	.021	.027	.166	.054	.030	.024	.002	…	…
1951	176.3	622.4	.283	.022	.026	.177	.056	.034	.022	.002	…	…
1952	184.0	637.3	.289	.023	.028	.185	.050	.028	.022	.002	…	…
1953	196.6	668.4	.294	.024	.029	.192	.047	.028	.020	.002	…	…
1954	193.5	650.8	.297	.026	.029	.194	.046	.024	.022	.002	…	…
1955	218.5	719.3	.304	.025	.029	.192	.056	.028	.028	.002	…	…
1956	233.6	747.0	.313	.027	.030	.203	.051	.027	.024	.002	…	…
1957	244.1	758.1	.322	.029	.031	.210	.049	.025	.024	.003	…	…
1958	238.0	725.2	.328	.032	.033	.215	.044	.022	.022	.004	12.053	2.589
1959	267.1	798.5	.335	.030	.033	.215	.053	.026	.027	.004	12.506	2.685
1960	277.6	820.8	.338	.031	.035	.221	.048	.023	.024	.004	12.672	2.797
1961	285.2	839.1	.340	.031	.035	.221	.048	.023	.025	.005	13.058	2.884
1962	311.1	904.8	.344	.030	.036	.221	.052	.023	.029	.005	13.550	2.997
1963	331.1	964.4	.343	.029	.035	.219	.055	.024	.031	.005	14.135	3.093
1964	357.7	1,029.0	.348	.029	.036	.220	.058	.023	.034	.005	14.655	3.229
1965	392.7	1,111.7	.353	.028	.035	.222	.062	.024	.038	.005	14.979	3.321
1966	430.2	1,189.5	.362	.029	.034	.230	.062	.025	.037	.006	15.205	3.502
1967	452.6	1,217.0	.372	.031	.036	.240	.058	.023	.035	.007	15.344	3.685
1968	499.7	1,286.5	.388	.032	.039	.251	.058	.026	.032	.008	15.715	3.948
1969	542.2	1,339.6	.405	.034	.041	.268	.052	.025	.027	.010	15.700	4.206
1970	560.4	1,325.2	.423	.038	.045	.286	.042	.021	.021	.013	15.713	4.490
1971	605.1	1,360.6	.445	.040	.048	.295	.048	.022	.026	.013	16.158	4.774
1972	671.8	1,461.1	.460	.041	.048	.306	.052	.023	.029	.013	16.490	5.045
1973	753.0	1,569.7	.480	.042	.049	.322	.053	.026	.027	.014	16.832	5.425
1974	812.8	1,533.4	.530	.050	.053	.363	.045	.028	.018	.018	16.331	5.930
1975	881.5	1,488.1	.592	.062	.059	.390	.062	.028	.034	.019	16.691	6.510
1976	995.5	1,583.5	.629	.065	.060	.414	.072	.033	.038	.017	16.986	7.040
1977	1,126.1	1,686.6	.668	.068	.062	.439	.080	.036	.044	.018	17.257	7.581
1978	1,274.1	1,789.8	.712	.073	.064	.473	.082	.037	.044	.020	17.358	8.219
1979	1,417.4	1,840.4	.770	.082	.066	.523	.076	.038	.038	.024	17.221	9.002
1980	1,540.8	1,807.9	.852	.095	.077	.581	.068	.037	.031	.031	17.096	9.939
1981	1,738.4	1,837.2	.946	.109	.090	.632	.078	.035	.044	.037	17.194	10.861
1982	1,782.2	1,782.2	1.000	.125	.094	.676	.063	.026	.037	.043	17.318	11.699
1983	1,915.9	1,866.9	1.026	.124	.098	.679	.086	.031	.055	.039	17.934	12.175
1984	2,153.1	2,039.3	1.056	.119	.099	.687	.108	.035	.073	.042	18.316	12.588
1985 p	2,283.3	2,098.4	1.088	.121	.102	.709	.115	.030	.086	.041	…	…
1982: I	1,777.4	1,799.1	.988	.120	.092	.666	.066	.027	.038	.044	17.203	11.456
II	1,783.2	1,791.7	.995	.123	.092	.672	.063	.027	.037	.045	17.301	11.619
III	1,789.0	1,777.8	1.006	.127	.094	.679	.065	.026	.038	.041	17.375	11.804
IV	1,779.4	1,760.2	1.011	.131	.096	.685	.057	.023	.034	.042	17.402	11.928
1983: I	1,820.0	1,793.1	1.015	.128	.096	.682	.070	.023	.047	.040	17.700	12.070
II	1,884.9	1,842.5	1.023	.125	.099	.678	.082	.030	.053	.039	17.887	12.130
III	1,946.5	1,891.2	1.029	.124	.099	.676	.092	.035	.057	.039	18.036	12.185
IV	2,012.2	1,940.8	1.037	.121	.098	.680	.099	.034	.065	.039	18.109	12.313
1984: I	2,088.0	2,005.0	1.041	.119	.098	.679	.106	.038	.068	.039	18.319	12.447
II	2,147.0	2,043.0	1.051	.118	.099	.682	.111	.038	.073	.041	18.405	12.544
III	2,172.5	2,048.2	1.061	.119	.100	.691	.107	.032	.075	.043	18.298	12.638
IV	2,205.2	2,061.0	1.070	.120	.100	.697	.109	.032	.077	.044	18.255	12.730
1985: I	2,237.0	2,077.3	1.077	.120	.100	.703	.111	.029	.081	.043	18.260	12.835
II	2,265.8	2,087.2	1.086	.121	.103	.709	.111	.028	.083	.042	18.244	12.942
III p	2,301.6	2,106.9	1.092	.121	.102	.709	.120	.030	.090	.040	18.372	13.034

[1] Output is measured by gross domestic product of nonfinancial corporate business in 1982 dollars.

[2] This is equal to the deflator for gross domestic product of nonfinancial corporate business with the decimal point shifted two places to the left.

[3] Indirect business tax and nontax liability plus business transfer payments less subsidies.

[4] With inventory valuation and capital consumption adjustments.

Sources: Department of Commerce (Bureau of Economic Analysis) and Department of Labor (Bureau of Labor Statistics).

TABLE B-14.—*Personal consumption expenditures, 1929–85*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Personal consumption expenditures	Durable goods	Nondurable goods	Services	Durable goods			Nondurable goods	
					Motor vehicles and parts	Furniture and household equipment	Other	Food	Clothing and shoes
1929	77.3	9.2	37.7	30.4	3.3	4.7	1.2	19.5	9.4
1933	45.8	3.5	22.3	20.1	1.1	1.9	.5	11.5	4.6
1939	67.0	6.7	35.1	25.2	2.3	3.4	1.0	19.1	7.1
1940	71.0	7.8	37.0	26.2	2.8	3.8	1.1	20.2	7.5
1941	80.8	9.7	42.9	28.3	3.5	4.8	1.3	23.4	8.8
1942	88.6	6.9	50.8	31.0	.7	4.6	1.6	28.4	11.0
1943	99.5	6.5	58.6	34.3	.8	3.9	1.9	33.2	13.4
1944	108.2	6.7	64.3	37.2	.8	3.8	2.1	36.7	14.6
1945	119.6	8.0	71.9	39.7	1.0	4.5	2.5	40.6	16.5
1946	143.9	15.8	82.7	45.4	4.1	8.4	3.2	47.4	18.2
1947	161.9	20.4	90.9	50.6	6.6	10.6	3.3	52.3	18.8
1948	174.9	22.9	96.6	55.5	8.0	11.5	3.4	54.2	20.1
1949	178.3	25.0	94.9	58.4	10.6	11.3	3.2	52.5	19.3
1950	192.1	30.8	98.2	63.2	13.7	13.7	3.3	53.9	19.6
1951	208.1	29.9	109.2	69.0	12.2	14.1	3.6	60.7	21.3
1952	219.1	29.3	114.7	75.1	11.3	14.0	3.9	64.1	22.0
1953	232.6	32.7	117.8	82.1	13.9	14.7	4.1	65.4	22.2
1954	239.8	32.1	119.7	88.0	13.0	14.8	4.3	66.8	22.3
1955	257.9	38.9	124.7	94.3	17.8	16.4	4.6	68.6	23.3
1956	270.6	38.2	130.8	101.6	15.8	17.3	5.0	71.4	24.4
1957	285.3	39.7	137.1	108.5	17.3	17.2	5.2	75.1	24.5
1958	294.6	37.2	141.7	115.7	14.8	16.9	5.4	77.9	24.9
1959	316.3	42.8	148.5	125.0	18.9	18.1	5.8	80.7	26.4
1960	330.7	43.5	153.2	134.0	19.7	18.0	5.8	82.7	27.0
1961	341.1	41.9	157.4	141.8	17.8	18.3	5.8	84.8	27.6
1962	361.9	47.0	163.8	151.1	21.5	19.3	6.3	87.1	29.0
1963	381.7	51.8	169.4	160.6	24.4	20.7	6.8	89.5	29.8
1964	409.3	56.8	179.7	172.8	26.0	23.2	7.6	94.6	32.4
1965	440.7	63.5	191.9	185.4	29.9	25.1	8.4	101.0	34.1
1966	477.3	68.5	208.5	200.3	30.3	28.2	10.0	109.0	37.4
1967	503.6	70.6	216.9	216.0	30.0	30.0	10.6	112.3	39.2
1968	552.5	81.0	235.0	236.4	36.1	32.9	12.0	121.6	43.2
1969	597.9	86.2	252.2	259.4	38.4	34.7	13.2	130.5	46.5
1970	640.0	85.7	270.3	284.0	35.9	35.7	14.1	142.1	47.8
1971	691.6	97.6	283.3	310.7	44.9	37.8	14.9	147.5	51.7
1972	757.6	111.2	305.1	341.3	51.5	42.4	17.2	158.5	56.4
1973	837.2	124.7	339.6	373.0	56.7	47.9	20.1	176.1	62.5
1974	916.5	123.8	380.9	411.9	50.3	51.5	22.0	198.2	66.0
1975	1,012.8	135.4	416.2	461.2	55.8	54.5	25.0	218.7	70.8
1976	1,129.3	161.5	452.0	515.9	72.7	60.2	28.5	236.2	76.6
1977	1,257.2	184.5	490.4	582.3	85.4	67.1	32.0	255.9	84.1
1978	1,403.5	205.6	541.8	656.1	95.1	73.9	36.6	282.2	94.8
1979	1,566.8	219.0	613.2	734.6	96.9	82.1	40.0	317.3	102.2
1980	1,732.6	219.3	681.4	831.9	90.3	86.2	42.8	349.1	109.0
1981	1,915.1	239.9	740.6	934.7	100.5	92.7	46.5	376.5	119.9
1982	2,050.7	252.7	771.0	1,027.0	108.9	95.7	46.1	398.8	124.4
1983	2,229.3	289.6	817.0	1,122.7	130.6	107.4	51.7	422.0	135.2
1984	2,423.0	331.1	872.4	1,219.6	153.8	119.4	57.9	451.7	147.4
1985 p	2,581.9	360.8	912.5	1,308.6	167.7	128.9	64.1	474.2	156.1
1982: I	1,996.3	245.1	758.1	993.1	105.7	92.3	47.1	388.9	123.4
II	2,023.8	248.9	762.6	1,012.2	105.7	95.1	48.1	396.7	122.8
III	2,065.6	252.8	776.7	1,036.1	108.3	96.4	48.1	402.7	125.0
IV	2,117.0	263.8	786.6	1,066.5	115.7	99.1	49.0	407.0	126.5
1983: I	2,146.0	268.5	792.4	1,085.2	115.9	102.1	50.4	413.1	129.4
II	2,210.1	285.3	811.7	1,113.0	129.2	105.4	50.7	419.0	135.0
III	2,254.9	295.3	826.5	1,133.1	134.0	109.0	52.2	426.0	135.5
IV	2,306.3	309.4	837.2	1,159.6	143.1	113.0	53.3	430.0	140.9
1984: I	2,358.6	321.6	856.6	1,180.4	150.1	116.1	55.4	440.0	144.4
II	2,414.4	330.2	873.2	1,211.1	154.1	118.8	57.3	449.9	149.1
III	2,439.0	331.1	876.6	1,231.3	153.6	119.3	58.2	457.1	146.4
IV	2,480.1	341.5	883.1	1,255.4	157.4	123.5	60.6	459.6	149.7
1985: I	2,525.0	351.5	895.7	1,277.8	163.1	125.7	62.7	465.5	152.8
II	2,563.3	356.5	910.2	1,296.6	165.4	127.6	63.4	472.1	156.3
III	2,606.1	376.0	914.5	1,315.6	183.0	128.6	64.4	475.9	155.7
IV p	2,633.3	359.2	929.4	1,344.6	159.3	133.9	66.0	483.3	159.8

See next page for continuation of table.

TABLE B-14.—*Personal consumption expenditures, 1929–85*—Continued

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Nondurable goods—cont'd			Services						
				Housing [1]	Household operation			Transportation	Medical care	Other
	Gasoline and oil	Fuel oil and coal	Other		Total	Electricity and gas	Other			
1929	1.8	1.6	5.4	11.7	4.0	1.2	2.9	2.6	2.2	9.9
1933	1.5	1.2	3.5	8.1	2.8	1.1	1.7	1.5	1.5	6.3
1939	2.2	1.4	5.3	9.4	3.8	1.4	2.4	2.0	2.1	8.0
1940	2.3	1.5	5.6	9.7	4.0	1.5	2.6	2.1	2.2	8.2
1941	2.6	1.7	6.4	10.4	4.3	1.5	2.7	2.4	2.4	8.9
1942	2.1	1.9	7.5	11.2	4.8	1.6	3.2	2.7	2.7	9.6
1943	1.3	2.0	8.7	11.8	5.2	1.7	3.5	3.4	2.9	11.0
1944	1.4	2.0	9.6	12.3	5.9	1.8	4.1	3.7	3.3	12.0
1945	1.8	2.2	10.8	12.8	6.4	1.9	4.5	4.0	3.6	12.9
1946	3.4	2.5	11.3	14.2	6.8	2.1	4.7	5.0	4.6	15.0
1947	4.0	3.0	12.8	16.0	7.5	2.3	5.1	5.3	5.6	16.3
1948	4.8	3.4	14.1	17.9	8.1	2.6	5.4	5.8	6.3	17.4
1949	5.3	3.1	14.7	19.6	8.5	2.9	5.6	5.9	6.5	17.8
1950	5.5	3.4	15.8	21.7	9.5	3.3	6.2	6.2	6.9	18.8
1951	6.1	3.5	17.6	24.3	10.4	3.7	6.7	6.8	7.4	20.1
1952	6.8	3.5	18.4	27.0	11.2	4.1	7.1	7.3	8.3	21.4
1953	7.4	3.4	19.4	29.9	12.1	4.5	7.6	8.0	9.3	22.9
1954	7.8	3.5	19.3	32.3	12.7	5.0	7.7	8.2	10.2	24.6
1955	8.6	3.8	20.4	34.4	14.2	5.5	8.6	8.5	10.8	26.5
1956	9.4	3.9	21.7	36.7	15.4	6.1	9.3	8.9	11.7	28.9
1957	10.2	4.1	23.2	39.3	16.3	6.5	9.8	9.4	12.8	30.7
1958	10.6	4.2	24.2	42.0	17.4	7.1	10.4	9.7	14.0	32.5
1959	11.3	4.0	26.1	45.0	18.7	7.6	11.1	10.5	15.3	35.4
1960	12.0	3.8	27.7	48.2	20.3	8.3	11.9	11.2	16.4	38.0
1961	12.0	3.8	29.2	51.2	21.2	8.8	12.3	11.7	17.5	40.3
1962	12.6	3.8	31.4	54.7	22.4	9.4	12.9	12.2	19.4	42.4
1963	13.0	4.0	33.1	58.0	23.6	9.9	13.7	12.7	21.0	45.3
1964	13.6	4.1	35.0	61.4	25.0	10.4	14.6	13.4	24.1	48.9
1965	14.8	4.4	37.6	65.4	26.5	10.9	15.6	14.5	25.9	53.1
1966	16.0	4.7	41.4	69.5	28.2	11.5	16.7	15.9	28.3	58.5
1967	17.1	4.8	43.5	74.1	30.1	12.2	17.9	17.3	31.1	63.5
1968	18.6	4.7	47.0	79.7	32.3	13.0	19.3	18.9	35.7	69.9
1969	20.5	4.6	50.2	86.8	35.0	14.0	21.0	20.9	40.9	75.8
1970	21.9	4.4	54.1	94.0	37.7	15.2	22.5	23.7	46.1	82.5
1971	23.2	4.6	56.4	102.7	40.9	16.6	24.3	27.1	51.8	86.2
1972	24.4	5.1	60.8	112.1	45.2	18.4	26.8	29.8	57.8	96.5
1973	28.1	6.3	66.6	123.1	49.6	20.0	29.6	31.2	64.4	104.7
1974	36.1	7.8	72.7	135.1	55.4	23.5	31.9	33.3	72.4	115.7
1975	39.7	8.4	78.5	148.4	63.5	28.5	35.0	35.7	84.2	129.3
1976	43.0	10.1	86.0	163.5	72.3	32.5	39.8	41.3	95.9	142.9
1977	46.9	11.1	92.4	182.4	81.7	37.6	44.1	49.2	111.5	157.5
1978	51.3	12.0	101.4	205.2	90.9	42.1	48.8	53.5	125.1	181.4
1979	66.1	15.8	111.8	231.1	100.3	46.8	53.4	59.0	141.4	202.7
1980	83.7	18.0	121.5	261.5	113.9	56.4	57.5	64.5	164.2	227.9
1981	92.7	19.4	132.2	295.6	127.5	63.5	64.0	68.3	193.5	249.7
1982	89.1	18.6	140.1	321.1	143.4	72.8	70.6	69.7	217.8	275.1
1983	90.1	17.5	152.1	344.0	155.9	80.2	75.7	74.7	237.4	310.7
1984	90.7	17.9	164.7	371.3	166.0	84.6	81.4	82.1	259.5	340.7
1985 ᵖ	92.0	15.8	174.3	403.3	173.2	88.8	84.4	86.8	280.3	365.1
1982: I	91.5	19.0	135.2	313.3	139.9	72.3	67.6	68.1	208.1	263.7
II	86.4	18.4	138.3	316.9	142.0	72.0	70.0	69.1	214.8	269.5
III	88.6	18.9	141.5	323.7	143.7	71.9	71.7	70.4	221.3	277.1
IV	89.8	18.2	145.2	330.3	148.0	74.8	73.2	71.1	226.9	290.2
1983: I	86.5	15.7	147.5	335.4	149.7	74.9	74.8	72.3	230.6	297.1
II	89.4	17.6	150.7	340.3	155.6	79.9	75.7	72.9	235.2	309.0
III	92.5	18.5	154.1	346.8	157.4	82.1	75.3	76.1	239.0	313.8
IV	92.1	18.3	155.8	353.6	160.8	83.9	76.9	77.4	244.8	323.0
1984: I	92.0	18.9	161.3	359.8	161.4	81.7	79.8	79.8	250.0	329.4
II	91.9	18.2	164.1	367.6	166.6	84.8	81.8	81.9	257.1	338.0
III	89.1	17.8	166.2	375.5	166.9	84.5	82.4	82.3	262.6	343.9
IV	89.8	16.8	167.3	382.3	168.9	87.2	81.7	84.4	268.1	351.7
1985: I	89.3	16.1	172.1	389.1	174.2	93.0	81.3	85.6	271.9	357.0
II	92.9	15.4	173.5	398.1	171.1	87.0	84.1	86.2	278.5	362.7
III	92.2	16.0	174.8	408.0	173.3	87.6	85.7	86.7	281.8	365.8
IV ᵖ	93.7	15.9	176.8	418.0	174.0	87.5	86.6	88.7	288.9	375.0

[1] Includes imputed rental value of owner-occupied housing.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-15.—*Gross and net private domestic investment, 1929–85*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross private domestic investment	Less: Capital consumption allowances with capital consumption adjustment	Equals: Net private domestic investment						
			Total	Net fixed investment					Change in business inventories
				Total	Nonresidential			Residential	
					Total	Structures	Producers' durable equipment		
1929	16.7	9.9	6.7	5.0	3.3	1.8	1.4	1.7	1.7
1933	1.6	7.6	-6.1	-4.5	-3.5	-1.7	-1.8	-1.0	-1.6
1939	9.5	9.0	.5	.1	-.7	-1.1	.4	.8	.4
1940	13.4	9.4	4.1	1.9	.7	-.8	1.5	1.2	2.2
1941	18.3	10.3	8.0	3.5	2.0	-.3	2.3	1.5	4.5
1942	10.3	11.3	-1.0	-2.7	-2.1	-1.7	-.5	-.6	1.8
1943	6.2	11.6	-5.3	-4.7	-3.1	-2.4	-.7	-1.6	-.6
1944	7.7	12.0	-4.2	-3.2	-1.3	-1.9	.5	-1.9	-1.0
1945	11.3	12.4	-1.1	-.1	1.7	-1.0	2.8	-1.8	-1.0
1946	31.5	14.2	17.3	10.9	6.9	2.4	4.5	4.0	6.4
1947	35.0	17.6	17.5	17.9	10.7	1.9	8.7	7.3	-.5
1948	47.1	20.4	26.7	22.0	11.8	2.5	9.3	10.2	4.7
1949	36.5	22.0	14.5	17.6	8.7	2.2	6.5	8.9	-3.1
1950	55.1	23.6	31.5	24.6	10.3	2.8	7.5	14.4	6.8
1951	60.5	27.2	33.3	23.1	11.6	3.9	7.7	11.5	10.2
1952	53.5	29.2	24.4	21.3	10.1	3.8	6.4	11.2	3.1
1953	54.9	30.9	24.0	23.6	11.9	4.8	7.1	11.7	.4
1954	54.1	32.5	21.6	23.3	10.2	5.0	5.2	13.0	-1.6
1955	69.7	34.4	35.3	29.6	13.2	5.9	7.3	16.4	5.7
1956	72.7	38.1	34.6	29.9	15.6	7.9	7.7	14.4	4.6
1957	71.1	41.1	29.9	28.5	15.9	7.9	8.1	12.6	1.4
1958	63.6	42.8	20.8	22.3	9.6	6.3	3.2	12.7	-1.5
1959	80.2	44.6	35.5	29.8	12.1	6.4	5.7	17.7	5.8
1960	78.2	46.4	31.8	28.7	13.4	7.3	6.1	15.4	3.1
1961	77.1	47.8	29.4	27.0	11.9	7.3	4.6	15.1	2.4
1962	87.6	49.4	38.2	32.1	14.9	8.0	6.9	17.2	6.1
1963	93.1	51.4	41.8	35.9	16.0	7.9	8.1	19.9	5.8
1964	99.6	53.9	45.7	40.3	20.3	9.4	10.9	20.0	5.4
1965	116.2	57.4	58.8	48.9	29.3	13.2	16.1	19.6	9.9
1966	128.6	62.1	66.5	52.3	35.8	15.2	20.7	16.5	14.2
1967	125.7	67.4	58.3	48.0	32.3	14.4	18.0	15.7	10.3
1968	137.0	73.9	63.1	55.2	34.2	15.1	19.0	21.0	7.9
1969	153.2	81.4	71.8	62.0	39.8	17.4	22.4	22.2	9.8
1970	148.8	88.8	60.0	56.9	36.8	17.4	19.4	20.1	3.1
1971	172.5	97.5	74.9	67.2	34.5	16.8	17.7	32.7	7.8
1972	202.0	107.9	94.1	83.6	40.5	17.4	23.1	43.1	10.5
1973	238.8	118.1	120.7	101.1	56.1	21.7	34.4	45.0	19.6
1974	240.8	137.5	103.4	87.9	55.8	22.0	33.7	32.2	15.4
1975	219.6	161.8	57.8	63.4	37.5	15.6	21.9	25.9	-5.6
1976	277.7	179.3	98.4	82.4	40.9	16.0	24.8	41.6	16.0
1977	344.1	201.5	142.5	121.3	58.6	17.6	41.0	62.6	21.3
1978	416.8	229.9	186.9	158.3	82.2	25.0	57.2	76.1	28.6
1979	454.8	265.8	189.1	176.1	98.9	34.5	64.5	77.2	13.0
1980	437.0	303.8	133.1	141.5	88.9	39.4	49.5	52.6	-8.3
1981	515.5	347.8	167.7	143.7	98.6	51.7	46.9	45.0	24.0
1982	447.3	383.2	64.1	88.7	65.5	45.9	19.6	23.2	-24.5
1983	501.9	399.6	102.3	108.7	42.1	25.3	16.8	66.6	-6.4
1984	674.0	418.9	255.1	188.0	99.3	42.5	56.8	88.8	67.1
1985 p	670.4	438.2	232.2	223.1	133.3	61.2	72.1	89.8	9.1
1982: I	459.5	373.3	86.2	110.4					-24.1
II	467.8	379.8	88.0	93.0					-5.0
III	452.2	386.3	65.9	74.9					-9.0
IV	409.6	393.2	16.4	76.3					-59.9
1983: I	425.0	394.5	30.4	73.1					-42.7
II	483.7	396.1	87.6	93.2					-5.6
III	521.2	403.3	117.9	120.7					-2.8
IV	577.6	404.4	173.2	147.7					25.5
1984: I	658.8	409.1	249.6	157.5					92.1
II	673.3	416.4	256.9	188.0					68.9
III	687.9	422.5	265.4	197.1					68.3
IV	676.2	427.7	248.5	209.5					39.0
1985: I	657.6	430.5	227.0	208.5					18.5
II	672.8	433.8	239.0	223.5					15.5
III	666.1	441.4	224.7	224.5					.2
IV p	685.2	447.3	238.0	235.9					2.1

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–16.—*Gross and net private domestic investment in 1982 dollars, 1929–85*

[Billions of 1982 dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross private domestic investment	Less: Capital consumption allowances with capital consumption adjustment	Equals: Net private domestic investment						
			Total	Net fixed investment					Change in business inventories
				Total	Nonresidential			Residential	
					Total	Structures	Producers' durable equipment		
1929	139.2	86.8	52.4	41.6	26.2	16.8	9.4	15.4	10.8
1933	22.7	86.5	−63.8	−53.0	−40.2	−24.3	−16.0	−12.8	−10.7
1939	86.0	84.4	1.6	−2.3	−10.1	−12.0	1.9	7.8	3.9
1940	111.8	84.9	26.9	12.5	1.5	−8.5	10.0	11.1	14.4
1941	138.8	86.3	52.5	24.7	12.0	−3.5	15.6	12.7	27.8
1942	76.7	86.9	−10.2	−22.1	−17.5	−15.9	−1.6	−4.6	12.0
1943	50.4	85.7	−35.3	−36.0	−24.4	−20.7	−3.8	−11.5	.7
1944	56.4	84.8	−28.4	−23.3	−10.5	−15.2	4.7	−12.8	−5.2
1945	76.5	85.4	−8.9	−.5	10.5	−8.3	18.8	−11.0	−8.4
1946	178.1	88.0	90.1	62.2	39.5	15.4	24.1	22.7	27.9
1947	177.9	91.8	86.1	87.1	52.6	11.7	40.9	34.5	−1.0
1948	208.2	96.8	111.4	99.1	54.3	14.3	40.0	44.8	12.3
1949	168.8	101.7	67.1	76.7	37.9	12.7	25.2	38.9	−9.7
1950	234.9	106.5	128.4	104.2	43.3	15.7	27.6	60.9	24.2
1951	235.2	111.8	123.3	92.5	46.9	18.8	28.1	45.6	30.8
1952	211.8	117.0	94.8	84.8	41.7	18.8	22.9	43.2	10.0
1953	216.6	122.1	94.4	91.7	47.0	22.9	24.1	44.7	2.8
1954	212.6	127.4	85.2	90.0	40.4	24.4	16.0	49.6	−4.8
1955	259.8	132.6	127.2	110.9	49.9	27.7	22.2	60.9	16.3
1956	257.8	138.3	119.5	106.5	54.9	32.5	22.4	51.6	12.9
1957	243.4	143.5	99.9	96.9	51.7	30.7	20.9	45.2	3.0
1958	221.4	147.7	73.7	77.1	31.5	24.8	6.6	45.6	−3.4
1959	270.3	151.9	118.4	101.9	38.5	25.0	13.6	63.4	16.5
1960	260.5	156.3	104.1	96.4	41.4	27.9	13.6	55.0	7.7
1961	259.1	160.6	98.4	91.2	37.3	28.1	9.3	53.8	7.3
1962	288.6	165.1	123.5	107.3	46.4	30.3	16.0	61.0	16.2
1963	307.1	170.3	136.8	120.1	49.2	29.1	20.1	70.9	16.6
1964	325.9	176.3	149.6	133.9	63.3	34.0	29.2	70.6	15.7
1965	367.0	183.7	183.4	158.1	90.4	46.2	44.2	67.7	25.2
1966	390.5	192.2	198.3	161.4	106.3	50.4	55.8	55.1	36.9
1967	374.4	201.1	173.4	144.6	93.6	45.9	47.7	50.9	28.8
1968	391.8	209.8	181.9	160.9	96.1	46.7	49.3	64.8	21.0
1969	410.3	219.8	190.5	165.3	103.1	49.7	53.4	62.7	25.1
1970	381.5	229.8	151.8	143.6	89.3	46.1	43.3	54.2	8.2
1971	419.3	239.5	179.8	160.2	76.1	40.4	35.7	84.1	19.6
1972	465.4	253.4	212.1	190.3	85.3	39.8	45.5	105.0	21.8
1973	520.8	263.6	257.1	217.1	116.5	46.8	69.8	100.6	40.0
1974	481.3	276.1	205.3	172.0	106.9	42.5	64.4	65.1	33.3
1975	383.3	287.0	96.3	109.1	60.8	27.9	32.9	48.3	−12.8
1976	453.5	297.3	156.2	134.1	61.8	27.3	34.6	72.2	22.1
1977	521.3	309.6	211.7	182.6	85.2	28.7	56.5	97.4	29.1
1978	576.9	323.7	253.3	216.5	111.6	37.2	74.3	104.9	36.8
1979	575.2	341.3	234.0	218.9	124.3	44.8	79.5	94.6	15.0
1980	509.3	356.1	153.2	160.1	101.3	47.2	54.1	58.7	−6.9
1981	545.5	369.7	175.8	152.0	105.5	56.0	49.4	46.5	23.9
1982	447.3	383.2	64.1	88.7	65.5	45.9	19.6	23.2	−24.5
1983	503.4	394.0	109.4	114.9	49.8	28.8	21.0	65.1	−5.5
1984	661.3	405.9	255.4	192.7	109.6	45.2	64.4	83.1	62.7
1985 p	650.6	423.3	227.3	220.0	137.3	58.3	79.0	82.8	7.3
1982: I	464.2	377.7	86.5	110.5					−24.0
II	467.5	381.0	86.5	91.9					−5.4
III	448.6	384.0	64.6	74.0					−9.4
IV	408.8	390.0	18.8	78.1					−59.3
1983: I	422.5	388.9	33.6	75.8					−42.2
II	489.0	391.4	97.6	101.3					−3.7
III	526.3	398.3	128.0	126.6					1.4
IV	575.9	397.3	178.6	156.0					22.6
1984: I	649.0	400.7	248.3	164.7					83.6
II	662.9	404.2	258.7	192.7					66.0
III	673.3	407.7	265.6	200.7					64.9
IV	659.9	411.0	248.9	212.8					36.1
1985: I	639.6	415.2	224.4	208.6					15.8
II	655.6	420.1	235.5	220.4					15.1
III	645.0	426.6	218.4	220.2					−1.8
IV p	662.2	431.2	231.0	230.9					.1

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-17.—*Inventories and final sales of business, 1946–85*

[Billions of dollars, except as noted; seasonally adjusted]

Quarter	Inventories [1]							Final sales [2]	Inventory—final sales ratio	
	Total	Farm	Nonfarm						Total	Nonfarm [3]
			Total	Manufacturing	Wholesale trade	Retail trade	Other			
Fourth quarter										
1946	70.7	19.6	51.0	24.6	10.4	12.8	3.2	15.9	4.45	3.21
1947	79.9	21.0	58.8	29.0	11.1	14.5	4.1	18.4	4.33	3.19
1948	85.1	19.3	65.8	32.2	12.5	16.6	4.5	19.8	4.31	3.33
1949	77.1	16.7	60.4	28.6	12.5	15.4	3.9	19.7	3.92	3.07
1950	96.1	22.5	73.7	34.9	14.7	19.2	4.9	21.8	4.41	3.38
1951	108.8	24.9	83.9	43.1	15.6	19.7	5.5	24.9	4.38	3.37
1952	108.0	23.3	84.7	44.0	15.6	19.4	5.6	26.4	4.09	3.20
1953	109.1	22.0	87.1	46.0	15.8	20.0	5.2	27.5	3.96	3.16
1954	106.8	21.2	85.5	43.9	16.1	20.2	5.3	28.0	3.82	3.06
1955	114.0	19.9	94.1	48.3	17.6	22.8	5.4	30.2	3.78	3.12
1956	122.8	19.9	102.8	54.0	18.9	23.7	6.2	31.9	3.84	3.22
1957	126.3	21.2	105.1	54.3	19.2	25.0	6.6	33.3	3.80	3.16
1958	126.2	22.6	103.7	52.7	19.3	25.1	6.6	34.3	3.68	3.02
1959	131.7	22.1	109.6	55.2	21.0	26.2	7.2	36.2	3.64	3.03
1960	135.5	23.3	112.2	56.2	21.3	27.5	7.2	37.5	3.61	2.99
1961	137.2	23.8	113.4	57.2	21.8	27.0	7.4	39.5	3.47	2.87
1962	143.8	25.2	118.6	60.3	22.4	28.3	7.5	41.8	3.44	2.84
1963	149.6	25.7	123.8	62.2	23.9	29.6	8.0	44.5	3.36	2.78
1964	155.3	24.5	130.9	65.9	25.2	31.0	8.8	47.1	3.30	2.78
1965	169.1	28.0	141.0	70.7	26.9	33.7	9.8	52.1	3.24	2.70
1966	185.2	27.4	157.8	80.9	30.3	36.2	10.4	55.3	3.35	2.85
1967	197.4	27.9	169.5	87.5	32.7	36.9	12.4	58.8	3.36	2.88
1968	211.8	29.1	182.6	94.0	34.6	40.7	13.3	64.8	3.27	2.82
1969	232.4	31.8	200.6	103.4	37.9	44.5	14.9	68.8	3.38	2.91
1970	240.3	31.1	209.2	105.8	41.7	45.8	16.0	72.4	3.32	2.89
1971	257.8	35.4	222.4	107.3	45.2	52.3	17.6	78.9	3.27	2.82
1972	285.6	44.3	241.3	113.6	50.0	57.7	19.9	87.7	3.26	2.75
1973	352.6	65.5	287.1	136.1	59.4	66.4	25.2	96.8	3.64	2.97
1974	423.3	62.4	360.9	177.0	75.6	74.6	33.7	104.6	4.05	3.45
1975	428.8	64.3	364.5	177.8	76.2	74.7	35.8	117.1	3.66	3.11
1976	463.3	60.2	403.1	194.9	86.1	82.7	39.4	128.5	3.60	3.14
1977	505.7	59.3	446.4	210.6	96.2	93.3	46.3	143.9	3.51	3.10
1978	588.2	73.7	514.5	238.4	113.8	107.8	54.5	165.1	3.56	3.12
1979	674.8	80.7	594.1	281.1	133.7	117.0	62.3	183.2	3.68	3.24
1980	739.3	84.5	654.8	310.7	154.8	122.7	66.7	201.1	3.68	3.26
1981	789.0	81.6	707.4	330.2	164.7	134.0	78.5	217.8	3.62	3.25
1982	771.5	79.2	692.2	316.1	162.2	134.7	79.2	229.5	3.36	3.02
1983	789.1	79.9	709.2	317.3	164.0	147.0	80.9	246.6	3.20	2.88
1984	858.5	83.6	774.8	345.7	178.5	161.7	88.9	269.3	3.19	2.88
1985 [p]	859.1	74.9	784.2	341.0	179.5	171.9	91.8	288.2	2.98	2.72
1982: I	784.0	82.9	701.1	327.6	161.8	132.3	79.5	220.3	3.56	3.18
II	786.6	84.2	702.4	323.4	164.7	133.6	80.7	221.5	3.55	3.17
III	784.7	82.1	702.6	321.0	164.2	136.8	80.7	223.0	3.52	3.15
IV	771.5	79.2	692.2	316.1	162.2	134.7	79.2	229.5	3.36	3.02
1983: I	764.5	79.3	685.2	310.1	159.1	135.9	80.1	232.0	3.30	2.95
II	769.9	79.2	690.7	311.4	158.8	139.5	80.9	236.4	3.26	2.92
III	778.5	76.3	702.2	315.2	162.3	142.6	82.1	241.3	3.23	2.91
IV	789.1	79.9	709.2	317.3	164.0	147.0	80.9	246.6	3.20	2.88
1984: I	820.1	86.2	733.9	327.2	168.4	154.2	84.0	251.7	3.26	2.92
II	836.5	87.1	749.4	336.2	171.9	155.4	85.9	260.3	3.21	2.88
III	850.7	85.5	765.3	344.2	176.2	156.8	88.1	264.0	3.22	2.90
IV	858.5	83.6	774.8	345.7	178.5	161.7	88.9	269.3	3.19	2.88
1985: I	859.9	82.9	777.0	344.6	179.0	165.0	88.5	275.6	3.12	2.82
II	858.5	79.9	778.6	343.6	180.4	164.8	89.7	279.2	3.08	2.79
III	856.1	77.8	778.4	342.7	180.0	165.2	90.5	284.5	3.01	2.74
IV [p]	859.1	74.9	784.2	341.0	179.5	171.9	91.8	288.2	2.98	2.72

[1] End of quarter.

[2] Quarterly totals at monthly rates. Business final sales equals final sales less gross product of households and institutions, government, and rest of the world, and includes a small amount of final sales by farms.

[3] Ratio based on total business final sales, which includes a small amount of final sales by farms.

NOTE.—The industry classification of inventories is on an establishment basis and is based on the 1972 Standard Industrial Classification (SIC) beginning 1948 and on the 1942 SIC prior to 1948.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-18.—*Inventories and final sales of business in 1982 dollars, 1947–85*

[Billions of 1982 dollars, except as noted; seasonally adjusted]

Quarter	Inventories [1]							Final sales [2]	Inventory—final sales ratio	
	Total	Farm	Nonfarm						Total	Nonfarm [3]
			Total	Manufacturing	Wholesale trade	Retail trade	Other			
Fourth quarter:										
1947	251.3	43.3	208.0	105.1	39.9	39.6	23.5	74.8	3.36	2.78
1948	263.5	45.4	218.1	108.6	42.7	43.7	23.1	77.1	3.42	2.83
1949	253.9	44.4	209.5	102.9	42.8	42.8	21.1	77.3	3.28	2.71
1950	278.1	47.7	230.4	109.8	47.6	49.5	23.4	82.6	3.37	2.79
1951	308.9	51.5	257.4	133.2	49.0	49.6	25.6	90.4	3.42	2.85
1952	318.9	54.6	264.3	139.0	50.0	49.6	25.8	93.9	3.40	2.81
1953	321.6	54.3	267.4	142.7	50.4	50.8	23.5	98.0	3.28	2.73
1954	316.9	55.9	260.9	135.0	51.1	51.2	23.6	97.7	3.24	2.67
1955	333.2	56.0	277.1	142.5	54.8	57.1	22.7	102.5	3.25	2.70
1956	346.1	53.7	292.4	153.2	56.6	57.8	24.8	104.7	3.31	2.79
1957	349.1	54.9	294.2	152.1	56.0	59.8	26.3	105.9	3.30	2.78
1958	345.7	57.3	288.4	146.8	56.0	59.4	26.3	107.7	3.21	2.68
1959	362.2	58.1	304.2	153.5	60.7	61.9	28.1	111.4	3.25	2.73
1960	370.0	59.4	310.5	154.7	61.8	65.2	28.8	114.1	3.24	2.72
1961	377.2	60.8	316.5	158.8	63.1	64.2	30.3	118.7	3.18	2.67
1962	393.4	63.5	329.9	167.2	65.0	67.5	30.1	123.4	3.19	2.67
1963	410.1	65.8	344.2	172.6	68.9	70.3	32.4	130.4	3.14	2.64
1964	425.8	64.0	361.8	180.9	72.6	73.4	34.9	136.3	3.12	2.65
1965	451.0	66.3	384.7	191.6	76.5	79.2	37.4	147.7	3.05	2.60
1966	487.9	66.1	421.7	213.6	85.1	84.3	38.7	150.2	3.25	2.81
1967	516.6	67.7	449.0	229.2	90.7	84.2	45.0	156.4	3.30	2.87
1968	537.7	68.2	469.4	239.0	93.5	90.5	46.5	163.7	3.28	2.87
1969	562.8	69.0	493.8	248.5	98.9	96.4	50.0	165.4	3.40	2.98
1970	571.1	69.8	501.2	248.3	105.8	96.6	50.5	166.8	3.42	3.00
1971	590.7	73.4	517.3	246.1	110.7	107.2	53.2	172.6	3.42	3.00
1972	612.4	75.9	536.6	251.7	114.0	114.0	56.9	185.4	3.30	2.89
1973	652.5	81.4	571.0	267.9	118.4	122.1	62.6	188.9	3.45	3.02
1974	685.7	81.3	604.5	288.5	128.4	121.1	66.4	184.3	3.72	3.28
1975	673.0	82.6	590.3	281.9	124.0	115.9	68.6	191.5	3.51	3.08
1976	695.1	79.1	616.1	294.0	131.2	122.3	68.5	199.3	3.49	3.09
1977	724.2	77.2	647.0	301.9	140.5	130.9	73.7	209.0	3.47	3.10
1978	761.0	77.8	683.2	314.1	151.6	139.1	78.4	221.5	3.44	3.08
1979	776.0	82.4	693.6	324.7	156.1	136.7	76.1	225.6	3.44	3.08
1980	769.1	77.8	691.4	326.8	161.6	130.4	72.7	225.3	3.41	3.07
1981	793.0	82.6	710.3	330.3	165.0	135.5	79.5	224.6	3.53	3.16
1982	768.4	81.2	687.2	315.2	161.5	132.9	77.6	226.1	3.40	3.04
1983	763.0	75.4	687.6	310.0	158.1	141.2	78.3	235.4	3.24	2.92
1984	825.6	82.2	743.4	333.4	171.9	153.1	85.1	247.4	3.34	3.01
1985 p	832.9	79.4	753.6	330.5	174.4	160.6	88.1	258.0	3.23	2.92
1982: I	787.0	81.6	705.4	328.4	162.8	133.5	80.7	224.0	3.51	3.15
II	785.6	82.6	703.0	323.9	164.5	133.5	81.2	222.9	3.53	3.15
III	783.3	83.4	699.8	320.7	163.9	135.8	79.5	221.3	3.54	3.16
IV	768.4	81.2	687.2	315.2	161.5	132.9	77.6	226.1	3.40	3.04
1983: I	757.9	79.1	678.8	309.1	157.7	133.5	78.5	227.2	3.34	2.99
II	756.9	77.7	679.2	308.5	155.8	136.0	78.9	229.8	3.29	2.96
III	757.3	74.4	682.9	308.7	156.7	137.8	79.7	231.8	3.27	2.95
IV	763.0	75.4	687.6	310.0	158.1	141.2	78.3	235.4	3.24	2.92
1984: I	783.9	79.1	704.8	316.3	160.7	146.7	81.1	237.9	3.29	2.96
II	800.4	80.7	719.7	324.7	164.6	147.9	82.5	243.3	3.29	2.96
III	816.6	81.8	734.8	332.3	169.1	149.0	84.3	244.5	3.34	3.00
IV	825.6	82.2	743.4	333.4	171.9	153.1	85.1	247.4	3.34	3.01
1985: I	829.6	83.2	746.4	333.7	171.9	155.4	85.4	252.0	3.29	2.96
II	833.4	84.3	749.1	333.6	174.1	155.2	86.2	253.0	3.29	2.96
III	832.9	83.4	749.5	332.6	174.1	155.7	87.0	256.5	3.25	2.92
IV p	832.9	79.4	753.6	330.5	174.4	160.6	88.1	258.0	3.23	2.92

[1] End of quarter.

[2] Quarterly totals at monthly rates. Business final sales equals final sales less gross product of households and institutions, government, and rest of world, and includes a small amount of final sales by farms.

[3] Ratio based on total business final sales, which includes a small amount of final sales by farms.

Note.—The industry classification of inventories is on an establishment basis and is based on the 1972 Standard Industrial Classification (SIC) beginning 1948 and on the 1942 SIC prior to 1948.

Source: Department of Commerce, Bureau of Economic Analysis.

Table B–19.—*Foreign transactions in the national income and product accounts, 1929–85*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Receipts from foreigners					Payments to foreigners								
	Total	Exports of goods and services			Capital grants received by the United States (net)	Total	Imports of goods and services			Transfer payments (net)			Interest paid by government to foreigners	Net foreign investment
		Total	Merchandise	Services			Total	Merchandise	Services	Total	From persons (net)	From government (net)		
1929	7.1	7.1	5.3	1.7		7.1	5.9	4.5	1.5	0.4	0.3	0.0	0.0	0.8
1933	2.4	2.4	1.7	.7		2.4	2.1	1.5	.6	.2	.2	.0	.0	.2
1939	4.6	4.6	3.3	1.3		4.6	3.4	2.4	1.0	.2	.2	.0	.0	1.0
1940	5.4	5.4	4.1	1.3		5.4	3.7	2.7	1.0	.2	.2	.0	.0	1.5
1941	6.1	6.1	4.5	1.6		6.1	4.7	3.4	1.3	.2	.2	.0	.0	1.3
1942	5.0	5.0	3.4	1.6		5.0	4.8	2.7	2.1	.2	.1	.1	.0	−.1
1943	4.6	4.6	2.9	1.7		4.6	6.5	3.4	3.1	.2	.2	−.1	.0	−2.1
1944	5.5	5.5	3.6	1.9		5.5	7.2	3.8	3.4	.3	.4	−.1	.0	−2.0
1945	7.4	7.4	5.4	2.1		7.4	7.9	3.9	4.0	.8	.5	.4	.0	−1.3
1946	15.2	15.2	11.8	3.4		15.2	7.3	5.1	2.3	2.9	.7	2.3	.0	4.9
1947	20.3	20.3	16.1	4.2		20.3	8.3	6.0	2.4	2.6	.7	2.0	.0	9.3
1948	17.5	17.5	13.3	4.3		17.5	10.6	7.6	3.0	4.5	.7	3.9	.0	2.4
1949	16.4	16.4	12.2	4.1		16.4	9.8	6.9	2.9	5.6	.5	5.1	.0	.9
1950	14.5	14.5	10.2	4.3		14.5	12.3	9.1	3.2	4.0	.4	3.6	.0	−1.8
1951	19.8	19.8	14.2	5.5		19.8	15.3	11.2	4.1	3.5	.4	3.1	.0	.9
1952	19.2	19.2	13.4	5.8		19.2	16.0	10.8	5.2	2.5	.4	2.1	.1	.6
1953	18.1	18.1	12.4	5.7		18.1	16.8	11.0	5.8	2.5	.5	2.0	.1	−1.3
1954	18.8	18.8	12.9	5.9		18.8	16.3	10.4	5.9	2.3	.5	1.8	.1	.2
1955	21.1	21.1	14.4	6.7		21.1	18.1	11.5	6.6	2.5	.4	2.1	.1	.4
1956	25.2	25.2	17.6	7.6		25.2	19.9	12.8	7.1	2.4	.5	1.9	.2	2.8
1957	28.2	28.2	19.6	8.7		28.2	20.9	13.3	7.6	2.3	.5	1.8	.2	4.8
1958	24.4	24.4	16.4	8.0		24.4	21.1	13.0	8.1	2.3	.4	1.8	.1	.9
1959	25.0	25.0	16.5	8.5		25.0	23.5	15.3	8.2	2.3	.4	1.9	.3	−1.2
1960	29.9	29.9	20.5	9.4		29.9	24.0	15.2	8.8	2.4	.4	1.9	.3	3.2
1961	31.1	31.1	20.9	10.1		31.1	23.9	15.1	8.8	2.7	.5	2.2	.3	4.2
1962	33.1	33.1	21.7	11.4		33.1	26.2	16.9	9.3	2.8	.5	2.3	.3	3.8
1963	35.7	35.7	23.3	12.3		35.7	27.5	17.7	9.7	2.9	.6	2.3	.4	4.9
1964	40.5	40.5	26.7	13.8		40.5	29.6	19.4	10.2	3.0	.7	2.3	.5	7.5
1965	42.9	42.9	27.8	15.1		42.9	33.2	22.2	11.0	3.0	.7	2.3	.5	6.2
1966	46.6	46.6	30.7	15.8		46.6	39.1	26.3	12.7	3.1	.7	2.4	.5	3.8
1967	49.5	49.5	32.2	17.3		49.5	42.1	27.8	14.4	3.3	.9	2.4	.6	3.5
1968	54.8	54.8	35.3	19.5		54.8	49.3	33.9	15.4	3.2	.9	2.3	.7	1.6
1969	60.4	60.4	38.3	22.1		60.4	54.7	36.8	17.9	3.2	1.0	2.2	.8	1.7
1970	69.8	68.9	44.5	24.4	0.9	69.8	60.5	40.9	19.6	3.5	1.2	2.3	1.0	4.8
1971	73.1	72.4	45.6	26.8	.7	73.1	66.1	46.6	19.5	3.4	1.2	2.7	1.8	1.3
1972	82.1	81.4	51.7	29.6	.7	82.1	78.2	56.9	21.3	4.1	1.1	2.9	2.7	−2.9
1973	114.1	114.1	73.9	40.2	.0	114.1	97.3	71.8	25.5	4.1	1.3	2.9	3.8	8.8
1974	149.5	151.5	101.0	50.5	−2.0	149.5	135.2	104.5	30.7	4.6	1.0	3.6	4.3	5.4
1975	161.3	161.3	109.6	51.7	.0	161.3	130.3	99.0	31.3	4.9	1.0	4.0	4.5	21.6
1976	177.7	177.7	117.5	60.2	.0	177.7	158.9	124.3	34.6	5.4	1.0	4.4	4.5	9.0
1977	191.6	191.6	123.1	68.6	.0	191.6	189.7	151.9	37.9	5.1	.9	4.2	5.5	−8.7
1978	227.5	227.5	144.7	82.8	.0	227.5	223.4	176.5	46.9	5.6	.9	4.7	8.7	−10.1
1979	292.4	291.2	183.3	107.9	1.1	292.4	272.5	211.9	60.5	6.2	1.0	5.2	11.1	2.6
1980	352.1	351.0	225.1	125.9	1.2	352.1	318.9	247.5	71.4	7.7	1.1	6.5	12.6	13.0
1981	383.9	382.8	238.3	144.5	1.1	383.9	348.9	266.5	82.4	7.5	1.0	6.5	16.9	10.6
1982	361.9	361.9	214.0	148.0	.0	361.9	335.6	249.5	86.1	9.0	1.3	7.8	18.3	−1.0
1983	354.1	354.1	206.0	148.1	.0	354.1	359.4	271.4	88.0	9.5	1.0	8.5	17.8	−32.7
1984	384.6	384.6	224.1	160.5	.0	384.6	443.8	336.0	107.9	12.0	1.3	10.7	19.8	−91.0
1985 p	370.4	370.4	219.2	151.2	.0	370.4	444.8	337.0	107.8	15.3	2.1	13.3	21.3	−111.0
1982: I	373.0	373.0	225.1	147.9	.0	373.0	338.4	252.6	85.7	9.4	1.3	8.0	18.0	7.3
II	378.9	378.9	224.0	155.0	.0	378.9	336.8	246.2	90.6	8.1	1.4	6.8	17.5	16.5
III	359.9	359.9	210.5	149.4	.0	359.9	345.4	259.2	86.2	8.0	1.2	6.8	18.8	−12.3
IV	335.9	335.9	196.3	139.6	.0	335.9	321.9	239.9	82.0	10.6	1.1	9.5	18.9	−15.4
1983: I	344.6	344.6	200.8	143.8	.0	344.6	316.2	236.1	80.1	7.1	.9	6.2	17.7	3.6
II	345.0	345.0	200.4	144.6	.0	345.0	347.5	261.6	85.9	8.2	1.0	7.2	17.5	−28.2
III	358.0	358.0	205.0	153.0	.0	358.0	377.6	285.4	92.2	9.5	1.1	8.4	17.8	−47.0
IV	368.8	368.8	217.7	151.1	.0	368.8	396.2	302.5	93.7	13.3	1.2	12.2	18.3	−59.0
1984: I	375.4	375.4	218.7	156.7	.0	375.4	412.8	314.9	97.9	9.5	1.4	8.1	18.6	−65.5
II	382.3	382.3	223.0	159.3	.0	382.3	447.6	338.1	109.6	9.6	1.2	8.3	19.1	−93.9
III	391.4	391.4	225.8	165.6	.0	391.4	453.3	340.4	112.9	12.1	1.2	11.0	20.2	−94.3
IV	389.5	389.5	229.0	160.5	.0	389.5	461.7	350.6	111.1	17.0	1.5	15.5	21.2	−110.4
1985: I	379.6	379.6	225.8	153.8	.0	379.6	421.9	316.1	105.8	13.3	2.1	11.2	21.2	−76.8
II	369.2	369.2	219.7	149.5	.0	369.2	439.5	331.9	107.6	14.3	1.8	12.5	21.1	−105.8
III	363.2	363.2	213.6	149.6	.0	363.2	451.0	343.5	107.5	16.9	2.2	14.7	21.5	−126.2
IV p	369.7	369.7	217.9	151.8	.0	369.7	466.9	356.5	110.4	16.7	2.1	14.7	21.5	−135.4

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-20.—*Exports and imports of goods and services in 1982 dollars, 1929–85*

[Billions of 1982 dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Exports of goods and services							Imports of goods and services						
	Total	Merchandise			Services			Total	Merchandise			Services		
		Total	Durable goods	Nondurable goods	Total	Factor income [1]	Other		Total	Durable goods	Nondurable goods	Total	Factor income [1]	Other
1929	42.1	29.7	12.3	17.5	12.3	7.6	4.8	37.4	29.3	7.4	22.0	8.0	2.6	5.4
1933	22.7	15.9	4.5	11.4	6.8	3.7	3.1	24.2	19.2	4.0	15.2	4.9	1.3	3.6
1939	36.2	26.5	13.3	13.1	9.8	5.2	4.5	30.1	24.0	6.9	17.0	6.1	2.2	4.0
1940	40.0	30.5	18.9	11.6	9.4	4.6	4.8	31.7	25.6	8.8	16.8	6.2	2.0	4.1
1941	42.0	31.7	20.2	11.6	10.3	5.2	5.1	38.2	29.4	11.0	18.4	8.8	1.9	6.9
1942	29.1	19.5	13.4	6.1	9.6	4.8	4.9	36.9	21.0	6.7	14.3	15.8	1.7	14.2
1943	25.1	15.2	10.5	4.8	9.8	4.6	5.2	48.0	25.0	6.5	18.5	23.0	1.9	21.2
1944	27.3	16.4	11.0	5.4	10.9	4.9	6.0	51.1	26.5	6.7	19.7	24.6	2.1	22.5
1945	35.2	24.0	12.6	11.3	11.2	4.8	6.5	54.1	26.0	6.9	19.1	28.2	2.5	25.7
1946	69.0	54.1	23.1	31.0	14.9	5.6	9.4	42.0	30.0	7.8	22.2	12.0	1.9	10.1
1947	82.3	65.5	34.4	31.1	16.9	7.2	9.7	39.9	29.3	7.8	21.5	10.6	2.1	8.5
1948	66.2	49.1	24.5	24.6	17.1	8.5	8.6	47.1	33.9	9.4	24.5	13.1	2.3	10.8
1949	65.0	48.4	24.1	24.2	16.7	8.2	8.5	46.2	33.3	8.9	24.4	13.0	2.6	10.4
1950	59.2	42.2	21.0	21.3	17.0	9.1	7.9	54.6	40.9	11.5	29.5	13.6	2.8	10.8
1951	72.0	51.1	23.8	27.3	20.9	10.9	10.0	57.4	40.4	11.5	28.9	17.1	3.1	14.0
1952	70.1	49.0	25.3	23.7	21.2	11.3	9.9	63.3	41.9	13.0	28.9	21.4	2.9	18.4
1953	66.9	46.4	25.8	20.6	20.5	11.0	9.5	69.7	44.6	13.7	30.9	25.1	3.1	21.9
1954	70.0	48.8	26.9	21.9	21.2	11.6	9.6	67.5	42.1	11.9	30.3	25.4	3.3	22.1
1955	76.9	53.2	30.3	22.9	23.7	13.0	10.7	76.9	48.3	14.7	33.5	28.6	3.6	25.0
1956	87.9	61.8	34.4	27.4	26.1	14.1	12.0	83.6	53.6	16.8	36.8	30.0	3.4	26.6
1957	94.9	66.6	37.2	29.4	28.3	14.8	13.5	87.9	56.1	17.1	39.0	31.8	3.4	28.4
1958	82.4	56.6	31.0	25.6	25.8	13.2	12.6	92.8	58.1	16.9	41.3	34.6	3.7	30.9
1959	83.7	56.1	30.5	25.6	27.6	14.0	13.5	101.9	68.0	22.8	45.3	33.8	4.0	29.8
1960	98.4	68.8	37.9	30.9	29.6	15.7	13.9	102.4	67.5	21.7	45.8	34.9	4.6	30.3
1961	100.7	69.1	38.0	31.1	31.6	16.9	14.7	103.3	69.0	21.1	47.9	34.3	4.8	29.6
1962	106.9	72.2	39.8	32.4	34.7	18.5	16.2	114.4	78.9	24.8	54.0	35.5	4.6	30.9
1963	114.7	77.6	42.1	35.5	37.1	20.0	17.2	116.6	81.2	26.2	55.0	35.4	5.1	30.3
1964	128.8	87.7	48.2	39.5	41.1	21.8	19.3	122.8	86.3	29.0	57.4	36.5	5.6	30.9
1965	132.0	88.2	50.0	38.2	43.8	23.2	20.6	134.7	97.0	35.6	61.4	37.7	6.2	31.6
1966	138.4	94.0	53.6	40.4	44.4	22.8	21.6	152.1	109.1	44.0	65.2	43.0	7.0	36.0
1967	143.6	96.5	58.8	37.7	47.1	23.8	23.3	160.5	113.0	48.0	65.0	47.5	7.5	40.0
1968	155.7	104.9	64.8	40.1	50.8	26.3	24.5	185.3	135.7	61.7	74.0	49.6	8.6	41.0
1969	165.0	110.0	69.5	40.5	55.0	29.0	26.0	199.9	144.6	65.6	79.0	55.2	12.0	43.2
1970	178.3	120.6	74.3	46.3	57.6	29.6	28.0	208.3	150.9	66.8	84.1	57.4	12.5	45.0
1971	179.2	119.3	72.9	46.4	59.9	30.5	29.4	218.9	166.2	74.4	91.8	52.7	9.8	42.9
1972	195.2	131.3	80.0	51.3	64.0	33.9	30.1	244.6	190.7	84.4	106.4	53.9	10.2	43.7
1973	242.3	160.6	99.3	61.3	81.7	46.2	35.4	273.8	218.2	88.9	129.4	55.6	13.9	41.7
1974	269.1	175.8	113.9	62.0	93.3	53.5	39.8	268.4	211.8	89.2	122.5	56.6	17.7	38.9
1975	259.7	171.5	112.1	59.5	88.2	45.6	42.6	240.8	187.9	72.4	115.5	52.9	16.3	36.6
1976	274.4	177.5	112.9	64.7	96.8	49.7	47.1	285.4	229.3	88.5	140.8	56.1	16.7	39.3
1977	281.6	178.1	111.2	66.9	103.6	53.5	50.1	317.1	259.4	99.3	160.1	57.7	16.1	41.6
1978	312.6	196.2	121.9	74.3	116.4	63.2	53.2	339.4	274.1	113.7	160.4	65.3	21.1	44.2
1979	356.8	218.2	136.6	81.6	138.6	86.6	52.0	353.2	277.9	115.7	162.2	75.3	30.8	44.5
1980	388.9	241.8	150.0	91.9	147.1	91.4	55.7	332.0	253.6	116.1	137.5	78.4	35.9	42.4
1981	392.7	238.5	143.8	94.6	154.3	96.3	57.9	343.4	258.7	126.1	132.6	84.7	41.1	43.6
1982	361.9	214.0	121.9	92.1	148.0	91.6	56.3	335.6	249.5	125.3	124.2	86.1	40.5	45.7
1983	349.4	207.2	119.3	87.9	142.1	86.2	55.9	368.8	282.3	150.3	132.0	86.4	37.4	49.0
1984	370.9	222.5	130.7	91.8	148.3	93.4	54.9	455.9	352.1	201.5	150.6	103.8	48.9	54.9
1985 p	360.2	224.8	136.9	87.9	135.4	80.6	54.8	465.3	362.9	215.4	147.5	102.4	44.1	58.3
1982: I	374.1	222.9	127.6	95.2	151.2	92.6	58.6	333.7	247.6	127.4	120.2	86.0	41.4	44.6
II	378.5	222.5	126.8	95.7	155.9	98.6	57.3	336.8	246.1	129.0	117.1	90.7	44.7	46.0
III	359.5	211.4	122.5	89.0	148.0	92.4	55.6	347.8	261.5	127.6	133.9	86.3	40.8	45.5
IV	336.0	199.1	110.8	88.3	136.9	83.0	53.8	324.3	242.7	117.1	125.6	81.6	35.1	46.5
1983: I	342.8	203.0	114.8	88.2	139.8	81.7	58.1	320.3	241.2	130.8	110.5	79.1	33.5	45.6
II	342.4	202.9	116.8	86.1	139.4	83.6	55.9	357.4	272.7	141.1	131.6	84.6	36.2	48.5
III	353.1	206.8	119.4	87.4	146.3	90.5	55.8	389.3	298.8	153.7	145.1	90.5	39.8	50.7
IV	359.1	216.2	126.2	90.0	142.9	89.1	53.8	408.0	316.6	175.8	140.8	91.4	40.1	51.2
1984: I	362.7	216.1	126.7	89.4	146.6	91.8	54.8	423.3	328.5	184.1	144.3	94.8	43.6	51.3
II	366.6	218.7	128.5	90.2	147.8	93.5	54.3	457.0	351.4	199.5	151.9	105.6	51.6	54.0
III	376.9	224.6	132.6	92.0	152.3	96.8	55.5	465.6	357.4	206.6	150.8	108.2	52.0	56.2
IV	377.3	230.7	135.1	95.7	146.5	91.5	55.1	477.5	371.0	215.7	155.3	106.5	48.5	58.0
1985: I	368.7	229.3	137.1	92.2	139.4	82.4	57.0	440.5	338.9	203.9	135.0	101.6	43.5	58.1
II	358.2	223.9	137.4	86.5	134.3	80.7	53.6	459.3	356.9	208.0	148.9	102.5	44.6	57.9
III	353.5	220.0	135.8	84.2	133.5	79.1	54.4	473.3	371.5	220.9	150.6	101.8	43.7	58.1
IV p	360.4	225.9	137.5	88.5	134.5	80.4	54.1	488.0	384.3	228.7	155.6	103.7	44.9	58.9

[1] Factor income exports less factor income imports equals rest-of-the-world product.

Source: Department of Commerce, Bureau of Economic Analysis.

Table B–21.—*Relation of gross national product, net national product, and national income, 1929–85*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross national product	Less: Capital consumption allowances with capital consumption adjustment	Equals: Net national product	Less:			Plus: Subsidies less current surplus of government enterprises	Equals: National income
				Indirect business tax and nontax liability	Business transfer payments	Statistical discrepancy		
1929	103.9	9.9	94.0	7.1	0.6	1.5	−0.2	84.7
1933	56.0	7.6	48.4	7.1	.7	1.2	.0	39.4
1939	91.3	9.0	82.3	9.4	.5	1.7	.4	71.2
1940	100.4	9.4	91.1	10.1	.4	1.4	.4	79.6
1941	125.5	10.3	115.3	11.3	.5	.7	.1	102.8
1942	159.0	11.3	147.7	11.8	.5	−.7	.1	136.2
1943	192.7	11.6	181.1	12.8	.5	−1.7	.1	169.7
1944	211.4	12.0	199.4	14.2	.5	2.7	.6	182.6
1945	213.4	12.4	201.0	15.5	.5	4.0	.7	181.6
1946	212.4	14.2	198.2	17.1	.5	.7	.9	180.7
1947	235.2	17.6	217.6	18.4	.6	1.8	−.2	196.6
1948	261.6	20.4	241.2	20.1	.7	−1.3	−.1	221.5
1949	260.4	22.0	238.4	21.3	.8	.8	−.3	215.2
1950	288.3	23.6	264.6	23.4	.8	.8	.1	239.8
1951	333.4	27.2	306.2	25.3	.9	2.7	−.1	277.3
1952	351.6	29.2	322.5	27.7	1.0	1.8	−.3	291.6
1953	371.6	30.9	340.7	29.7	1.2	2.6	−.5	306.6
1954	372.5	32.5	340.0	29.6	1.1	2.7	−.3	306.3
1955	405.9	34.4	371.5	32.2	1.2	1.8	.0	336.3
1956	428.2	38.1	390.1	35.0	1.4	−1.9	.7	356.3
1957	451.0	41.1	409.9	37.4	1.5	−1.2	.7	372.8
1958	456.8	42.8	414.0	38.6	1.6	−.1	1.1	375.0
1959	495.8	44.6	451.2	41.7	1.8	−1.5	.1	409.2
1960	515.3	46.4	468.9	45.3	2.0	−2.8	.4	424.9
1961	533.8	47.8	486.1	48.0	2.0	−1.2	1.7	439.0
1962	574.6	49.4	525.2	51.5	2.1	.0	1.8	473.3
1963	606.9	51.4	555.5	54.6	2.4	−.6	1.1	500.3
1964	649.8	53.9	595.9	58.7	2.7	−1.4	1.7	537.6
1965	705.1	57.4	647.7	62.5	2.8	−1.2	1.6	585.2
1966	772.0	62.1	709.9	65.2	3.0	2.1	2.5	642.0
1967	816.4	67.4	749.0	70.1	3.1	−.4	1.6	677.7
1968	892.7	73.9	818.7	78.7	3.4	−1.1	1.4	739.1
1969	963.9	81.4	882.5	86.3	3.9	−3.9	1.9	798.1
1970	1,015.5	88.8	926.6	94.0	4.1	−1.1	2.9	832.6
1971	1,102.7	97.5	1,005.1	103.4	4.4	1.8	2.6	898.1
1972	1,212.8	107.9	1,104.8	111.1	4.9	−1.6	3.7	994.1
1973	1,359.3	118.1	1,241.2	120.8	5.5	−4.3	3.5	1,122.7
1974	1,472.8	137.5	1,335.4	129.0	5.8	−1.7	1.2	1,203.5
1975	1,598.4	161.8	1,436.6	140.0	7.4	2.5	2.4	1,289.1
1976	1,782.8	179.2	1,603.6	151.7	7.9	3.6	1.0	1,441.4
1977	1,990.5	201.5	1,789.0	165.7	8.6	.0	3.0	1,617.8
1978	2,249.7	229.9	2,019.8	178.1	9.3	−1.9	3.9	1,838.2
1979	2,508.2	265.8	2,242.4	189.4	10.3	−1.0	3.5	2,047.3
1980	2,732.0	303.8	2,428.1	213.3	12.1	4.9	5.7	2,203.5
1981	3,052.6	347.8	2,704.8	251.5	12.4	4.1	6.7	2,443.5
1982	3,166.0	383.2	2,782.8	258.8	14.3	−.1	8.7	2,518.4
1983	3,401.6	399.6	3,002.0	282.5	15.6	−.6	13.9	2,718.3
1984	3,774.7	418.9	3,355.8	310.6	17.3	−1.5	10.1	3,039.3
1985 p	3,992.5	438.2	3,554.3	328.5	19.3	.7	9.9	3,215.6
1982: I	3,112.6	373.3	2,739.3	254.5	13.4	−4.8	6.9	2,483.1
II	3,159.5	379.8	2,779.6	256.2	14.1	1.0	5.6	2,514.0
III	3,179.4	386.3	2,793.1	260.1	14.6	−3.2	6.7	2,528.4
IV	3,212.5	393.2	2,819.3	264.5	15.2	6.8	15.4	2,548.2
1983: I	3,268.7	394.5	2,874.1	267.0	15.3	−1.4	10.3	2,603.6
II	3,365.1	396.1	2,969.0	281.1	15.5	4.3	10.8	2,678.9
III	3,437.5	403.3	3,034.2	288.3	15.7	−4.3	13.0	2,747.4
IV	3,535.0	404.4	3,130.6	293.7	16.1	−1.2	21.5	2,843.5
1984: I	3,676.5	409.1	3,267.4	302.4	16.5	2.8	22.0	2,967.7
II	3,757.5	416.4	3,341.1	308.8	17.1	−1.9	4.0	3,021.1
III	3,812.2	422.5	3,389.7	314.0	17.6	.8	6.9	3,064.2
IV	3,852.5	427.7	3,424.8	317.4	18.1	−7.6	7.4	3,104.4
1985: I	3,917.5	430.5	3,487.0	321.3	18.6	2.5	10.7	3,155.3
II	3,960.6	433.8	3,526.8	329.8	19.1	−4.7	9.5	3,192.2
III	4,016.9	441.4	3,575.5	329.8	19.6	2.5	4.4	3,228.0
IV p	4,075.1	447.3	3,627.8	333.0	20.1	......	14.9	......

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-22.—*Relation of national income and personal income, 1929–85*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	National income	Less:				Plus:				Equals:
		Corporate profits with inventory valuation and capital consumption adjustments	Net interest	Contributions for social insurance	Wage accruals less disbursements	Government transfer payments to persons	Personal interest income	Personal dividend income	Business transfer payments	Personal income
1929	84.7	9.6	4.7	0.3	0.0	0.9	6.9	5.8	0.6	84.3
1933	39.4	−1.5	4.1	.3	.0	1.5	5.5	2.0	.7	46.3
1939	71.2	5.5	3.6	2.2	.0	2.5	5.3	3.8	.5	72.1
1940	79.6	8.8	3.3	2.4	.0	2.7	5.3	4.0	.4	77.6
1941	102.8	14.3	3.3	2.8	.0	2.6	5.3	4.4	.5	95.2
1942	136.2	19.7	3.1	3.5	.0	2.7	5.2	4.3	.5	122.4
1943	169.7	24.0	2.7	4.6	.2	2.5	5.1	4.4	.5	150.7
1944	182.6	24.2	2.3	5.2	−.2	3.1	5.2	4.6	.5	164.5
1945	181.6	19.7	2.2	6.3	.0	5.6	5.8	4.6	.5	170.0
1946	180.7	17.2	1.8	7.7	.0	10.8	6.6	5.6	.5	177.6
1947	196.6	22.9	2.3	6.7	.0	11.2	7.5	6.3	.6	190.2
1948	221.5	30.3	2.4	6.0	.0	10.6	8.0	7.0	.7	209.2
1949	215.2	28.0	2.6	6.6	.0	11.7	8.7	7.2	.8	206.4
1950	239.8	34.9	3.0	7.4	.0	14.4	9.6	8.8	.8	228.1
1951	277.3	39.9	3.5	8.8	.1	11.6	10.4	8.5	.9	256.5
1952	291.6	37.5	3.9	9.3	.0	12.2	11.2	8.5	1.0	273.8
1953	306.6	37.7	4.4	9.6	−.1	13.1	12.4	8.8	1.2	290.5
1954	306.3	36.6	5.2	10.6	.0	15.3	13.7	9.1	1.1	293.0
1955	336.3	47.1	5.8	12.0	.0	16.4	14.9	10.3	1.2	314.2
1956	356.3	45.7	6.5	13.5	.0	17.5	16.6	11.1	1.4	337.2
1957	372.8	45.3	7.8	15.5	.0	20.3	18.7	11.5	1.5	356.3
1958	375.0	40.3	9.5	15.9	.0	24.7	20.3	11.3	1.6	367.1
1959	409.2	51.4	10.2	18.8	.0	25.7	22.3	12.2	1.8	390.7
1960	424.9	49.5	11.3	21.9	.0	27.5	24.9	12.9	2.0	409.4
1961	439.0	50.3	12.9	22.9	.0	31.5	26.3	13.3	2.0	426.0
1962	473.3	58.3	14.6	25.4	.0	32.6	28.9	14.4	2.1	453.2
1963	500.3	63.6	16.3	28.5	.0	34.5	32.2	15.5	2.4	476.3
1964	537.6	70.7	18.2	30.1	.0	36.0	35.5	17.3	2.7	510.2
1965	585.2	81.3	20.9	31.6	.0	39.1	39.6	19.1	2.8	552.0
1966	642.0	86.6	24.3	40.6	.0	43.6	44.2	19.4	3.0	600.8
1967	677.7	84.1	27.4	45.5	.0	52.3	48.2	20.2	3.1	644.5
1968	739.1	90.7	29.8	50.4	.0	60.6	53.2	21.9	3.4	707.2
1969	798.1	87.4	34.6	57.9	.0	67.5	60.9	22.4	3.9	772.9
1970	832.6	74.7	41.2	62.2	.0	81.8	69.3	22.2	4.1	831.8
1971	898.1	87.1	46.3	68.9	.6	97.0	74.7	22.6	4.4	894.0
1972	994.1	100.7	51.0	79.0	.0	108.4	80.8	24.1	4.9	981.6
1973	1,122.7	113.3	59.6	97.6	−.1	124.1	93.3	26.6	5.5	1,101.7
1974	1,203.5	101.7	75.5	110.5	−.5	147.4	111.9	28.9	5.8	1,210.1
1975	1,289.1	117.6	83.8	118.5	.1	185.7	122.5	28.7	7.4	1,313.4
1976	1,441.4	145.2	88.8	134.5	.1	202.8	134.1	33.8	7.9	1,451.4
1977	1,617.8	174.8	105.3	149.8	.1	217.5	155.4	38.2	8.6	1,607.5
1978	1,838.2	197.2	126.3	171.7	.3	234.8	182.5	43.0	9.3	1,812.4
1979	2,047.3	200.1	158.3	197.8	−.2	262.8	221.5	48.1	10.3	2,034.0
1980	2,203.5	177.2	200.9	216.5	.0	312.6	271.9	52.9	12.1	2,258.5
1981	2,443.5	188.0	248.1	251.2	.1	355.7	335.4	61.3	12.4	2,520.9
1982	2,518.4	150.0	272.3	269.6	.0	396.2	369.7	63.9	14.3	2,670.8
1983	2,718.3	213.8	273.6	290.8	−.4	426.6	385.7	68.0	15.6	2,836.4
1984	3,039.3	273.3	300.2	325.2	.2	437.4	442.2	74.6	17.3	3,111.9
1985 ᵖ	3,215.6	299.0	287.7	354.9	−.2	465.2	456.5	78.9	19.3	3,294.2
1982: I	2,483.1	149.9	273.0	265.2	−.1	374.7	367.5	63.6	13.4	2,614.3
II	2,514.0	149.6	280.2	268.7	.0	386.4	377.0	63.1	14.1	2,655.9
III	2,528.4	154.3	269.1	271.3	.0	403.7	368.0	63.6	14.6	2,683.6
IV	2,548.2	146.1	266.9	273.0	.0	420.2	366.2	65.4	15.2	2,729.2
1983: I	2,603.6	173.4	268.5	284.1	.0	422.3	371.1	66.5	15.3	2,752.8
II	2,678.9	205.9	269.4	288.3	−1.3	429.6	377.2	66.9	15.5	2,805.7
III	2,747.4	228.4	276.4	292.4	−.4	425.6	392.1	68.3	15.7	2,852.4
IV	2,843.5	247.6	280.3	298.5	.0	428.8	402.6	70.2	16.1	2,934.8
1984: I	2,967.7	268.0	286.9	318.6	.2	433.8	417.2	72.1	16.5	3,033.8
II	3,021.1	277.8	297.6	323.2	.2	436.4	433.6	74.1	17.1	3,083.5
III	3,064.2	271.2	309.5	327.4	.0	438.4	456.8	75.3	17.6	3,144.2
IV	3,104.4	276.2	307.0	331.7	.6	441.1	461.3	76.9	18.1	3,186.2
1985: I	3,155.3	281.7	302.9	348.0	.1	459.0	462.8	77.9	18.6	3,240.9
II	3,192.2	288.1	292.4	352.9	−1.0	461.9	460.5	78.7	19.1	3,280.1
III	3,228.0	309.1	281.8	356.4	.0	468.6	450.6	79.1	19.6	3,298.5
IV ᵖ			273.7	362.3	.0	471.3	452.1	79.8	20.1	3,357.4

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–23.—*National income by type of income, 1929–85*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	National income [1]	Compensation of employees			Proprietors' income with inventory valuation and capital consumption adjustments							
						Farm			Nonfarm			
		Total	Wages and salaries	Supplements to wages and salaries [2]	Total	Total	Proprietors' income [3]	Capital consumption adjustment	Total	Proprietors' income [4]	Inventory valuation adjustment	Capital consumption adjustment
1929	84.7	51.1	50.5	0.7	14.4	6.1	6.3	−0.2	8.3	8.8	0.1	−0.6
1933	39.4	29.6	29.0	.6	5.4	2.5	2.5	0	2.9	3.9	−.5	−.5
1939	71.2	48.2	46.0	2.2	11.4	4.4	4.5	−.1	7.1	7.6	−.2	−.4
1940	79.6	52.2	49.9	2.3	12.6	4.4	4.5	−.1	8.2	8.6	.0	−.3
1941	102.8	64.8	62.1	2.8	17.1	6.4	6.5	−.2	10.8	11.7	−.6	−.3
1942	136.2	85.3	82.1	3.2	23.9	10.1	10.3	−.2	13.8	14.4	−.4	−.3
1943	169.7	109.6	105.8	3.8	28.8	12.0	12.2	−.2	16.8	17.1	−.2	−.2
1944	182.6	121.3	116.7	4.5	30.0	11.9	12.2	−.3	18.1	18.3	−.1	−.1
1945	181.6	123.3	117.5	5.8	31.5	12.4	12.6	−.3	19.1	19.3	−.1	−.1
1946	180.7	119.6	112.0	7.6	36.3	14.8	15.2	−.4	21.5	23.3	−1.7	−.1
1947	196.6	130.1	123.1	7.0	35.5	15.1	15.6	−.5	20.4	21.8	−1.5	.1
1948	221.5	142.1	135.5	6.5	40.4	17.5	18.2	−.7	22.9	23.1	−.4	.2
1949	215.2	142.0	134.7	7.3	35.9	12.8	13.5	−.7	23.1	22.2	.5	.5
1950	239.8	155.4	147.2	8.2	38.8	13.6	14.3	−.7	25.2	25.7	−1.1	.6
1951	277.3	181.6	171.6	10.0	44.0	16.0	16.8	−.8	28.0	27.7	−.3	.6
1952	291.6	196.3	185.6	10.7	44.4	15.0	15.9	−.9	29.4	28.5	.2	.7
1953	306.6	210.4	199.0	11.5	43.4	13.0	13.9	−.9	30.4	29.8	−.2	.7
1954	306.3	209.4	197.2	12.1	43.5	12.4	13.2	−.8	31.1	30.4	.0	.8
1955	336.3	225.9	212.1	13.8	45.4	11.3	12.1	−.8	34.0	33.5	−.2	.7
1956	356.3	244.7	229.0	15.7	46.9	11.1	12.0	−.9	35.8	35.4	−.5	.9
1957	372.8	257.8	239.9	17.8	48.8	11.0	11.9	−.9	37.8	37.2	−.3	.9
1958	375.0	259.8	241.3	18.5	51.5	13.1	14.0	−.9	38.5	37.7	−.1	.9
1959	409.2	281.2	259.8	21.4	51.7	10.8	11.7	−.9	40.9	40.1	.0	.9
1960	424.9	296.7	272.8	23.8	52.1	11.6	12.4	−.8	40.5	39.7	.0	.8
1961	439.0	305.6	280.5	25.1	54.3	12.0	12.8	−.8	42.3	41.7	.0	.6
1962	473.3	327.4	299.3	28.1	56.6	12.1	12.9	−.8	44.4	43.8	.0	.6
1963	500.3	345.5	314.8	30.7	57.7	11.9	12.6	−.7	45.7	45.1	.0	.7
1964	537.6	371.0	337.7	33.2	60.5	10.7	11.4	−.7	49.8	49.1	−.1	.7
1965	585.2	399.8	363.7	36.1	65.1	13.0	13.7	−.7	52.1	51.8	−.2	.4
1966	642.0	443.0	400.3	42.7	69.6	14.0	14.8	−.8	55.5	55.5	−.2	.3
1967	677.7	475.5	428.9	46.6	71.1	12.7	13.6	−.8	58.4	58.4	−.2	.2
1968	739.1	524.7	471.9	52.8	75.4	12.8	13.7	−.9	62.6	63.1	−.4	−.1
1969	798.1	578.4	518.3	60.1	79.3	14.6	15.8	−1.1	64.7	65.1	−.5	.1
1970	832.6	618.3	551.5	66.8	80.2	14.7	16.0	−1.3	65.4	66.0	−.5	.0
1971	898.1	659.4	584.5	74.9	86.8	15.5	16.8	−1.3	71.4	72.3	−.6	−.3
1972	994.1	726.2	638.7	87.6	98.3	19.4	21.1	−1.7	79.0	79.6	−.7	.1
1973	1,122.7	812.8	708.6	104.2	119.0	33.7	35.6	−1.9	85.3	87.2	−2.0	.1
1974	1,203.5	891.3	772.2	119.1	118.8	27.5	30.1	−2.6	91.3	95.3	−3.8	−.3
1975	1,289.1	948.7	814.7	134.0	125.4	25.4	29.0	−3.6	100.0	102.2	−1.2	−1.0
1976	1,441.4	1,057.9	899.6	158.3	137.7	20.6	24.6	−4.0	117.1	119.6	−1.3	−1.3
1977	1,617.8	1,176.6	994.0	182.6	152.9	20.5	25.1	−4.6	132.4	135.1	−1.3	−1.4
1978	1,838.2	1,329.2	1,119.6	209.7	176.2	27.0	32.4	−5.3	149.2	152.8	−2.3	−1.4
1979	2,047.3	1,491.4	1,251.9	239.5	191.9	31.7	38.0	−6.3	160.1	164.0	−2.9	−1.0
1980	2,203.5	1,638.2	1,372.0	266.3	180.7	20.5	28.1	−7.6	160.1	164.3	−2.9	−1.2
1981	2,443.5	1,807.4	1,510.4	297.1	186.8	30.7	39.4	−8.7	156.1	155.2	−1.4	2.3
1982	2,518.4	1,907.0	1,586.1	320.9	175.5	24.6	33.9	−9.3	150.9	148.5	−.5	2.9
1983	2,718.3	2,025.9	1,675.4	350.5	192.3	14.3	23.7	−9.4	178.0	167.7	−.9	11.2
1984	3,039.3	2,221.3	1,835.2	386.2	233.7	32.1	41.3	−9.3	201.6	183.6	−.5	18.5
1985 p	3,215.6	2,372.7	1,960.5	412.2	242.4	21.0	29.7	−8.7	221.3	193.5	−.3	28.2
1982: I	2,483.1	1,879.2	1,566.1	313.1	166.2	23.3	32.6	−9.3	143.0	140.2	−.4	3.2
II	2,514.0	1,899.3	1,580.1	319.2	173.0	23.6	32.9	−9.3	149.4	147.4	−.6	2.5
III	2,528.4	1,918.4	1,594.6	323.8	174.6	22.9	32.2	−9.3	151.7	149.5	−.4	2.5
IV	2,548.2	1,931.1	1,603.7	327.4	188.3	28.5	38.0	−9.4	159.8	156.9	−.6	3.5
1983: I	2,603.6	1,962.4	1,623.7	338.8	185.9	18.7	28.2	−9.4	167.2	160.8	−.6	7.0
II	2,678.9	2,001.5	1,654.4	347.1	187.3	11.8	21.3	−9.5	175.5	165.7	−.9	10.6
III	2,747.4	2,041.8	1,687.6	354.3	188.8	6.6	16.0	−9.5	182.3	170.9	−1.3	12.7
IV	2,843.5	2,097.6	1,735.8	361.8	207.1	20.0	29.3	−9.3	187.1	173.3	−.8	14.6
1984: I	2,967.7	2,160.9	1,782.4	378.5	240.3	44.4	53.6	−9.2	195.9	180.9	−1.3	16.3
II	3,021.1	2,204.8	1,821.0	383.8	229.1	29.4	38.7	−9.3	199.7	182.5	−.3	17.5
III	3,064.2	2,241.2	1,852.8	388.4	232.3	27.8	37.2	−9.3	204.5	185.6	−.1	19.0
IV	3,104.4	2,278.5	1,884.4	394.0	232.9	26.6	35.8	−9.2	206.3	185.4	−.2	21.2
1985: I	3,155.3	2,320.4	1,917.7	402.7	239.4	26.5	35.4	−8.9	212.9	188.3	−.3	24.9
II	3,192.2	2,356.9	1,947.6	409.4	240.9	22.8	31.6	−8.8	218.1	190.3	−.2	27.9
III	3,228.0	2,385.2	1,970.1	415.1	237.5	12.2	20.9	−8.7	225.3	195.3	.4	29.6
IV p		2,428.1	2,006.5	421.6	251.6	22.5	30.9	−8.4	229.1	199.9	−1.1	30.4

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[1] National income is the total net income earned in production. It differs from gross national product mainly in that it excludes depreciation charges and other allowances for business and institutional consumption of durable capital goods and indirect business taxes. See Table B–21.

[2] Employer contributions for social insurance and to private pension, health, and welfare funds; workers' compensation; directors' fees; and a few other minor items.

See next page for continuation of table.

TABLE B-23.—*National income by type of income, 1929–85*—Continued

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Rental income of persons with capital consumption adjustment			Corporate profits with inventory valuation and capital consumption adjustments									Net interest
	Total	Rental income of persons	Capital consumption adjustment	Total	Profits with inventory valuation adjustment and without capital consumption adjustment							Capital consumption adjustment	
					Total	Profits					Inventory valuation adjustment		
						Profits before tax	Profits tax liability	Profits after tax					
								Total	Dividends	Undistributed profits			
1929	4.9	5.6	−0.7	9.6	10.5	10.0	1.4	8.6	5.8	2.8	0.5	−0.9	4.7
1933	2.0	2.1	−.1	−1.5	−1.2	1.0	.5	.4	2.0	−1.6	−2.1	−.3	4.1
1939	2.6	3.2	−.5	5.5	6.5	7.2	1.4	5.7	3.8	2.0	−.7	−1.0	3.6
1940	2.7	3.3	−.6	8.8	9.8	10.0	2.8	7.2	4.0	3.2	−.2	−1.1	3.3
1941	3.2	4.0	−.8	14.3	15.4	17.9	7.6	10.3	4.4	5.8	−2.5	−1.1	3.3
1942	4.1	5.1	−.9	19.7	20.5	21.7	11.4	10.3	4.3	6.0	−1.2	−.8	3.1
1943	4.6	5.7	−1.1	24.0	24.5	25.3	14.1	11.2	4.4	6.7	−.8	−.5	2.7
1944	4.8	6.1	−1.3	24.2	24.0	24.2	12.9	11.3	4.6	6.7	−.3	.2	2.3
1945	5.0	6.5	−1.5	19.7	19.3	19.8	10.7	9.1	4.6	4.5	−.6	.4	2.2
1946	5.8	7.5	−1.7	17.2	19.6	24.8	9.1	15.7	5.6	10.2	−5.3	−2.4	1.8
1947	5.8	8.2	−2.4	22.9	25.9	31.8	11.3	20.5	6.3	14.2	−5.9	−2.9	2.3
1948	6.4	9.1	−2.7	30.3	33.4	35.6	12.4	23.2	7.0	16.2	−2.2	−3.2	2.4
1949	6.7	9.4	−2.7	28.0	31.1	29.2	10.2	19.0	7.2	11.8	1.9	−3.0	2.6
1950	7.7	10.5	−2.8	34.9	37.9	42.9	17.9	25.0	8.8	16.2	−5.0	−3.0	3.0
1951	8.3	11.5	−3.2	39.9	43.3	44.5	22.6	21.9	8.5	13.4	−1.2	−3.4	3.5
1952	9.4	12.7	−3.3	37.5	40.6	39.6	19.4	20.2	8.5	11.8	1.0	−3.2	3.9
1953	10.7	13.9	−3.3	37.7	40.2	41.2	20.3	20.9	8.8	12.1	−1.0	−2.5	4.4
1954	11.6	14.9	−3.2	36.6	38.4	38.7	17.6	21.1	9.1	11.9	−.3	−1.8	5.2
1955	12.0	15.3	−3.3	47.1	47.5	49.2	22.0	27.2	10.3	16.9	−1.7	−.4	5.8
1956	12.4	15.9	−3.5	45.7	46.9	49.6	22.0	27.6	11.1	16.6	−2.7	−1.2	6.5
1957	13.1	16.5	−3.5	45.3	46.6	48.1	21.4	26.7	11.5	15.2	−1.5	−1.3	7.8
1958	13.9	17.3	−3.4	40.3	41.6	41.9	19.0	22.9	11.3	11.6	−.3	−1.3	9.5
1959	14.6	18.0	−3.4	51.4	52.3	52.6	23.6	28.9	12.2	16.7	−.3	−.8	10.2
1960	15.3	18.7	−3.4	49.5	49.8	49.9	22.7	27.2	12.9	14.3	−.2	−.3	11.3
1961	15.8	19.1	−3.3	50.3	50.1	49.8	22.8	27.1	13.3	13.7	.3	.2	12.9
1962	16.5	19.8	−3.3	58.3	55.2	55.1	24.0	31.2	14.4	16.8	.0	3.1	14.6
1963	17.1	20.3	−3.2	63.6	59.8	59.8	26.2	33.5	15.5	18.0	.1	3.8	16.3
1964	17.3	20.5	−3.2	70.7	66.2	66.7	28.0	38.7	17.3	21.4	−.5	4.5	18.2
1965	18.1	21.3	−3.3	81.3	76.2	77.4	30.9	46.5	19.1	27.4	−1.2	5.2	20.9
1966	18.6	22.2	−3.6	86.6	81.2	83.3	33.7	49.6	19.4	30.2	−2.1	5.4	24.3
1967	19.6	23.5	−3.9	84.1	78.6	80.1	32.7	47.5	20.2	27.3	−1.6	5.5	27.4
1968	18.4	22.9	−4.5	90.7	85.4	89.1	39.4	49.7	22.0	27.7	−3.7	5.3	29.8
1969	18.4	24.2	−5.8	87.4	81.4	87.2	39.7	47.5	22.5	25.0	−5.9	6.1	34.6
1970	18.2	24.6	−6.4	74.7	69.5	76.0	34.4	41.7	22.5	19.2	−6.6	5.2	41.2
1971	18.6	25.9	−7.4	87.1	82.7	87.3	37.7	49.6	22.9	26.6	−4.6	4.3	46.3
1972	17.9	26.5	−8.6	100.7	94.9	101.5	41.9	59.6	24.4	35.2	−6.6	5.8	51.0
1973	18.0	28.1	−10.1	113.3	107.1	127.2	49.3	77.9	27.0	50.8	−20.0	6.2	59.6
1974	16.1	28.9	−12.7	101.7	99.4	138.9	51.8	87.1	29.7	57.3	−39.5	2.3	75.5
1975	13.5	28.6	−15.0	117.6	123.9	134.8	50.9	83.9	29.6	54.3	−11.0	−6.2	83.8
1976	11.9	28.9	−17.0	145.2	155.3	170.3	64.2	106.0	34.6	71.4	−14.9	−10.1	88.8
1977	8.2	28.8	−20.6	174.8	183.8	200.4	73.0	127.4	39.5	87.9	−16.6	−9.0	105.3
1978	9.3	34.2	−24.9	197.2	208.2	233.5	83.5	150.0	44.7	105.2	−25.3	−10.9	126.3
1979	5.6	35.7	−30.1	200.1	214.1	257.2	88.0	169.2	50.1	119.1	−43.2	−14.0	158.3
1980	6.6	41.4	−34.8	177.2	194.0	237.1	84.8	152.3	54.7	97.6	−43.1	−16.8	200.9
1981	13.3	52.2	−38.9	188.0	202.3	226.5	81.1	145.4	63.6	81.8	−24.2	−14.4	248.1
1982	13.6	54.4	−40.8	150.0	159.2	169.6	63.1	106.5	66.9	39.6	−10.4	−9.2	272.3
1983	12.8	54.4	−41.7	213.8	195.0	205.0	75.2	129.8	70.8	59.0	−10.0	18.8	273.6
1984	10.8	54.0	−43.2	273.3	232.3	237.6	93.6	144.0	78.1	65.9	−5.4	41.0	300.2
1985 p	14.0	57.4	−43.4	299.0	227.2	227.6	85.7	141.9	83.5	58.3	−.4	71.8	287.7
1982: I	14.8	55.8	−41.1	149.9	164.0	171.7	64.2	107.5	66.4	41.1	−7.7	−14.1	273.0
II	11.9	52.7	−40.7	149.6	160.7	171.0	64.0	107.0	66.0	40.9	−10.3	−11.1	280.2
III	12.0	52.8	−40.7	154.3	161.6	171.6	64.3	107.3	66.6	40.7	−10.0	−7.3	269.1
IV	15.8	56.5	−40.7	146.1	150.7	164.1	59.8	104.3	68.5	35.8	−13.4	−4.5	266.9
1983: I	13.3	55.1	−41.8	173.4	163.7	167.1	58.9	108.2	69.3	38.9	−3.4	9.7	268.5
II	14.8	55.9	−41.1	205.9	190.5	199.8	73.8	126.0	69.6	56.4	−9.3	15.5	269.4
III	11.9	54.1	−42.2	228.4	207.3	225.4	84.1	141.3	71.1	70.3	−18.1	21.0	276.4
IV	11.0	52.7	−41.7	247.6	218.7	227.6	84.0	143.6	73.1	70.6	−8.9	28.9	280.3
1984: I	11.6	53.3	−41.7	268.0	234.4	247.4	99.1	148.3	75.3	73.1	−13.0	33.5	286.9
II	11.9	55.1	−43.2	277.8	241.8	247.4	100.6	146.7	77.5	69.2	−5.6	36.0	297.6
III	10.0	53.7	−43.7	271.2	226.5	227.7	87.4	140.3	78.9	61.3	−1.3	44.8	309.5
IV	9.7	53.8	−44.1	276.2	226.3	228.0	87.4	140.6	80.7	60.0	−1.6	49.8	307.0
1985: I	11.0	54.3	−43.4	281.7	220.6	220.0	83.4	136.6	82.0	54.6	.7	61.1	302.9
II	13.8	56.6	−42.8	288.1	220.9	218.7	82.3	136.4	83.1	53.3	2.2	67.2	292.4
III	14.5	58.1	−43.7	309.1	233.2	228.6	87.4	141.1	83.9	57.3	4.7	75.9	281.8
IV p	16.5	60.4	−43.9	....	....	....	....	....	85.0	....	−9.0	83.2	273.7

[3] With inventory valuation adjustment and without capital consumption adjustment.
[4] Without inventory valuation and capital consumption adjustments.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-24.—*Sources of personal income, 1929–85*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Personal income	Wage and salary disbursements [1]						Other labor income [1]	Proprietors' income with inventory valuation and capital consumption adjustments	
		Total	Commodity-producing industries		Distributive industries	Service industries	Government and government enterprises		Farm	Nonfarm
			Total	Manufacturing						
1929	84.3	50.5	21.5	16.1	15.6	8.4	5.0	0.5	6.1	8.3
1933	46.3	29.0	9.8	7.8	8.8	5.2	5.2	.4	2.5	2.9
1939	72.1	46.0	17.4	13.6	13.3	7.1	8.2	.6	4.4	7.1
1940	77.6	49.9	19.7	15.6	14.2	7.5	8.5	.6	4.4	8.2
1941	95.2	62.1	27.5	21.7	16.3	8.1	10.2	.7	6.4	10.8
1942	122.4	82.1	39.1	30.9	18.0	9.0	16.0	.9	10.1	13.8
1943	150.7	105.6	49.0	40.9	20.1	9.9	26.6	1.1	12.0	16.8
1944	164.5	116.9	50.4	42.9	22.7	10.9	33.0	1.5	11.9	18.1
1945	170.0	117.5	45.9	38.2	24.8	11.9	34.9	1.8	12.4	19.1
1946	177.6	112.0	46.0	36.5	31.0	14.3	20.7	2.0	14.8	21.5
1947	190.2	123.1	54.2	42.5	35.2	16.1	17.5	2.4	15.1	20.4
1948	209.2	135.5	61.1	47.1	37.5	17.9	19.0	2.7	17.5	22.9
1949	206.4	134.8	57.8	44.6	37.7	18.5	20.8	2.9	12.8	23.1
1950	228.1	147.2	64.8	50.3	39.9	19.9	22.6	3.7	13.6	25.2
1951	256.5	171.5	76.4	59.4	44.4	21.6	29.2	4.6	16.0	28.0
1952	273.8	185.6	82.1	64.2	47.0	23.2	33.3	5.2	15.0	29.4
1953	290.5	199.0	89.8	71.3	49.9	25.0	34.4	5.9	13.0	30.4
1954	293.0	197.2	85.8	67.6	50.3	26.2	34.9	6.1	12.4	31.1
1955	314.2	212.1	93.3	73.9	53.6	28.7	36.6	7.0	11.3	34.0
1956	337.2	229.0	100.8	79.5	58.0	31.5	38.8	8.0	11.1	35.8
1957	356.3	239.9	104.4	82.5	60.7	33.8	41.0	9.0	11.0	37.8
1958	367.1	241.3	100.3	78.7	61.1	35.9	44.1	9.4	13.1	38.5
1959	390.7	259.8	109.9	86.9	65.1	38.8	46.0	10.6	10.8	40.9
1960	409.4	272.8	113.4	89.8	68.6	41.7	49.2	11.2	11.6	40.5
1961	426.0	280.5	114.0	89.9	69.6	44.4	52.4	11.8	12.0	42.3
1962	453.2	299.3	122.2	96.8	73.3	47.6	56.3	13.0	12.1	44.4
1963	476.3	314.8	127.4	100.7	76.8	50.7	60.0	14.0	11.9	45.7
1964	510.2	337.7	136.0	107.3	82.0	54.9	64.9	15.7	10.7	49.8
1965	552.0	363.7	146.6	115.7	87.9	59.4	69.9	17.8	13.0	52.1
1966	600.8	400.3	161.6	128.2	95.1	65.3	78.3	19.9	14.0	55.5
1967	644.5	428.9	169.0	134.3	101.6	72.0	86.4	21.7	12.7	58.4
1968	707.2	471.9	184.1	146.0	110.8	80.4	96.6	25.2	12.8	62.6
1969	772.9	518.3	200.4	157.7	121.7	90.6	105.5	28.5	14.6	64.7
1970	831.8	551.5	203.7	158.4	131.2	99.4	117.1	32.5	14.7	65.4
1971	894.0	583.9	209.1	160.5	140.4	107.9	126.5	36.7	15.5	71.4
1972	981.6	638.7	228.2	175.6	153.3	119.7	137.4	43.0	19.4	79.0
1973	1,101.7	708.7	255.9	196.6	170.3	133.9	148.7	49.2	33.7	85.3
1974	1,210.1	772.6	276.5	211.8	186.8	148.6	160.9	56.5	27.5	91.3
1975	1,313.4	814.6	277.1	211.6	198.1	163.4	176.0	65.9	25.4	100.0
1976	1,451.4	899.5	309.7	238.0	219.5	181.6	188.6	79.3	20.6	117.1
1977	1,607.5	993.9	346.1	266.7	242.7	202.8	202.3	94.1	20.5	132.4
1978	1,812.4	1,119.3	392.3	300.1	274.6	232.9	219.4	107.7	27.0	149.2
1979	2,034.0	1,252.1	441.4	334.8	307.8	266.8	236.1	122.7	31.7	160.1
1980	2,258.5	1,372.0	470.7	355.6	335.5	305.6	260.2	138.4	20.5	160.1
1981	2,520.9	1,510.3	512.2	386.7	366.8	346.9	284.4	150.3	30.7	156.1
1982	2,670.8	1,586.1	511.7	384.0	384.2	384.4	305.9	163.6	24.6	150.9
1983	2,836.4	1,675.8	523.0	397.4	404.2	424.4	324.2	179.5	14.3	178.0
1984	3,111.9	1,834.9	577.9	438.9	441.6	469.4	346.1	193.4	32.1	201.6
1985 [p]	3,294.2	1,960.7	607.2	457.5	468.8	513.9	370.8	206.4	21.0	221.3
1982: I	2,614.3	1,566.3	519.3	389.2	378.5	369.8	298.7	158.6	23.3	143.0
II	2,655.9	1,580.0	515.8	386.5	382.5	378.5	303.2	162.3	23.6	149.4
III	2,683.6	1,594.6	509.8	383.0	386.4	390.7	307.7	165.6	22.9	151.7
IV	2,729.2	1,603.6	501.8	377.4	389.3	398.5	314.0	168.0	28.5	159.8
1983: I	2,752.8	1,623.7	505.4	381.7	391.4	408.9	318.1	171.8	18.7	167.2
II	2,805.7	1,655.7	513.8	390.9	400.3	419.0	322.7	177.5	11.8	175.5
III	2,852.4	1,688.0	528.0	401.8	405.6	428.0	326.5	182.3	6.6	182.3
IV	2,934.8	1,735.8	544.9	415.1	419.5	441.9	329.6	186.3	20.0	187.1
1984: I	3,033.8	1,782.2	562.9	427.8	428.2	453.2	337.8	189.7	44.4	195.9
II	3,083.5	1,820.8	574.3	436.3	439.1	464.3	343.2	192.2	29.4	199.7
III	3,144.2	1,852.9	583.2	442.6	446.1	474.4	349.2	194.4	27.8	204.5
IV	3,186.2	1,883.9	591.2	449.0	453.0	485.5	354.1	197.2	26.6	206.3
1985: I	3,240.9	1,917.6	600.1	453.5	459.8	495.2	362.5	200.9	26.5	212.9
II	3,280.1	1,948.6	604.7	454.9	467.4	508.1	368.4	204.8	22.8	218.1
III	3,298.5	1,970.1	607.6	457.2	471.2	518.7	372.6	208.4	12.2	225.3
IV [p]	3,357.4	2,006.5	616.3	464.4	476.8	533.6	379.7	211.5	22.5	229.1

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[1] The total of wage and salary disbursements and other labor income differs from compensation of employees in Table B–23 in that it excludes employer contributions for social insurance and the excess of wage accruals over wage disbursements.

See next page for continuation of table.

TABLE B–24.—*Sources of personal income, 1929–85*—Continued

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Rental income of persons with capital consumption adjustment	Personal dividend income	Personal interest income	Transfer payments: Total	Transfer payments: Old-age, survivors, disability, and health insurance benefits	Transfer payments: Government unemployment insurance benefits	Transfer payments: Veterans benefits	Transfer payments: Government employees retirement benefits	Transfer payments: Aid to families with dependent children (AFDC)	Transfer payments: Other	Less: Personal contributions for social insurance	Nonfarm personal income [8]
1929	4.9	5.8	6.9	1.5	....	....	0.6	0.1	....	0.8	0.1	....
1933	2.0	2.0	5.5	2.1	....	....	.6	.2	....	1.4	.2	....
1939	2.6	3.8	5.3	3.0	0.0	0.4	.5	.3	....	1.7	.6	....
1940	2.7	4.0	5.3	3.1	.0	.5	.5	.3	....	1.7	.7	....
1941	3.2	4.4	5.3	3.1	.1	.4	.5	.3	....	1.8	.8	....
1942	4.1	4.3	5.2	3.1	.1	.4	.5	.3	....	1.8	1.2	....
1943	4.6	4.4	5.1	3.0	.2	.1	.5	.4	....	1.8	1.8	....
1944	4.8	4.6	5.2	3.6	.2	.1	1.0	.4	....	2.0	2.2	....
1945	5.0	4.6	5.8	6.2	.3	.4	3.0	.5	....	2.0	2.3	....
1946	5.8	5.6	6.6	11.3	.4	1.1	7.0	.7	....	2.1	2.0	....
1947	5.8	6.3	7.5	11.7	.5	.8	7.0	.7	0.3	2.5	2.1	172.0
1948	6.4	7.0	8.0	11.3	.6	.9	5.9	.7	.4	2.9	2.2	188.3
1949	6.7	7.2	8.7	12.5	.7	1.9	5.3	.9	.5	3.3	2.2	190.6
1950	7.7	8.8	9.6	15.2	1.0	1.5	7.7	1.0	.6	3.5	2.9	211.2
1951	8.3	8.5	10.4	12.6	1.9	.9	4.6	1.1	.6	3.6	3.4	237.1
1952	9.4	8.5	11.2	13.3	2.2	1.1	4.3	1.2	.5	3.9	3.8	255.4
1953	10.7	8.8	12.4	14.3	3.0	1.0	4.1	1.4	.5	4.2	4.0	274.2
1954	11.6	9.1	13.7	16.3	3.6	2.2	4.2	1.5	.6	4.2	4.6	277.5
1955	12.0	10.3	14.9	17.7	4.9	1.5	4.4	1.7	.6	4.5	5.2	299.6
1956	12.4	11.1	16.6	18.9	5.7	1.5	4.4	1.9	.6	4.8	5.8	322.8
1957	13.1	11.5	18.7	21.8	7.3	1.9	4.5	2.2	.7	5.2	6.7	341.9
1958	13.9	11.3	20.3	26.3	8.5	4.1	4.7	2.5	.8	5.7	6.9	350.4
1959	14.6	12.2	22.3	27.4	10.2	2.8	4.6	2.8	.9	6.2	7.9	376.2
1960	15.3	12.9	24.9	29.5	11.1	3.0	4.6	3.1	1.0	6.7	9.3	393.9
1961	15.8	13.3	26.3	33.5	12.6	4.3	5.0	3.4	1.1	7.1	9.7	409.9
1962	16.5	14.4	28.9	34.7	14.3	3.1	4.7	3.7	1.3	7.6	10.3	436.7
1963	17.1	15.5	32.2	36.9	15.2	3.0	4.8	4.2	1.4	8.3	11.8	460.0
1964	17.3	17.3	35.5	38.7	16.0	2.7	4.7	4.7	1.5	9.1	12.6	494.9
1965	18.1	19.1	39.6	41.9	18.1	2.3	4.9	5.2	1.7	9.8	13.3	534.0
1966	18.6	19.4	44.2	46.6	20.8	1.9	4.9	6.1	1.9	11.2	17.8	581.5
1967	19.6	20.2	48.2	55.5	25.5	2.2	5.6	6.9	2.3	13.0	20.6	626.3
1968	18.4	21.9	53.2	64.0	30.2	2.1	5.9	7.6	2.8	15.3	22.9	688.7
1969	18.4	22.4	60.9	71.4	32.9	2.2	6.7	8.7	3.5	17.3	26.2	752.1
1970	18.2	22.2	69.3	85.9	38.5	4.0	7.7	10.2	4.8	20.7	27.9	810.4
1971	18.6	22.6	74.7	101.5	44.5	5.8	8.8	11.8	6.2	24.5	30.7	871.8
1972	17.9	24.1	80.8	113.3	49.6	5.7	9.7	13.8	6.9	27.6	34.5	955.0
1973	18.0	26.6	93.3	129.6	60.4	4.4	10.4	16.0	7.2	31.2	42.6	1,059.7
1974	16.1	28.9	111.9	153.2	70.1	6.8	11.8	19.0	7.9	37.5	47.9	1,172.6
1975	13.5	28.7	122.5	193.1	81.4	17.6	14.5	22.7	9.2	47.6	50.4	1,276.9
1976	11.9	33.8	134.1	210.7	92.9	15.8	14.4	26.1	10.1	51.5	55.5	1,417.9
1977	8.2	38.2	155.4	226.1	104.9	12.7	13.8	29.0	10.6	55.1	61.2	1,572.6
1978	9.3	43.0	182.5	244.0	116.2	9.7	13.9	32.7	10.7	60.9	69.8	1,769.3
1979	5.6	48.1	221.5	273.1	131.8	9.8	14.4	36.9	11.0	69.1	81.0	1,983.2
1980	6.6	52.9	271.9	324.7	154.2	16.1	15.0	43.0	12.4	84.0	88.6	2,215.8
1981	13.3	61.3	335.4	368.1	182.0	15.9	16.1	49.4	13.0	91.8	104.5	2,465.6
1982	13.6	63.9	369.7	410.6	204.5	25.2	16.4	54.6	13.3	96.5	112.3	2,618.7
1983	12.8	68.0	385.7	442.2	221.7	26.3	16.6	58.7	14.2	104.7	119.8	2,795.3
1984	10.8	74.6	442.2	454.7	235.7	15.8	16.4	60.8	14.9	111.1	132.4	3,053.3
1985 p	14.0	78.9	456.5	484.5	253.4	15.5	16.8	66.6	15.4	116.8	149.1	3,247.1
1982: I	14.8	63.6	367.5	388.1	195.2	19.2	16.3	51.7	13.2	92.4	110.8	2,564.3
II	11.9	63.1	377.0	400.4	197.3	23.8	16.2	54.8	13.2	95.0	111.8	2,604.8
III	12.0	63.6	368.0	418.3	209.0	26.0	16.3	55.6	13.3	98.1	113.1	2,632.8
IV	15.8	65.4	366.2	435.4	216.6	31.8	16.6	56.1	13.6	100.6	113.5	2,672.8
1983: I	13.3	66.5	371.1	437.6	217.4	30.2	16.8	56.7	14.0	102.3	117.1	2,706.7
II	14.8	66.9	377.2	445.0	220.2	31.8	16.6	58.4	14.2	103.8	118.7	2,767.0
III	11.9	68.3	392.1	441.3	222.0	23.2	16.6	59.5	14.3	105.8	120.4	2,819.2
IV	11.0	70.2	402.6	444.9	227.0	19.9	16.5	60.2	14.4	106.8	123.0	2,888.3
1984: I	11.6	72.1	417.2	450.4	231.3	17.4	16.4	61.1	15.0	109.1	129.7	2,962.9
II	11.9	74.1	433.6	453.5	233.7	15.6	16.5	61.8	15.1	110.7	131.7	3,027.6
III	10.0	75.3	456.8	456.0	236.0	15.0	16.5	62.5	14.6	111.3	133.4	3,089.8
IV	9.7	76.9	461.3	459.2	241.8	15.4	16.3	57.7	14.8	113.2	134.9	3,132.7
1985: I	11.0	77.9	462.8	477.6	249.2	16.6	16.9	65.3	15.1	114.5	146.3	3,188.1
II	13.8	78.7	460.5	481.0	250.7	15.8	17.0	66.2	15.3	116.1	148.3	3,231.0
III	14.5	79.1	450.6	488.1	256.5	14.8	16.7	67.0	15.5	117.6	149.7	3,260.4
IV p	16.5	79.8	452.1	491.4	257.3	14.8	16.6	68.0	15.6	119.0	152.1	3,308.9

[8] Personal income exclusive of farm proprietors' income, farm wages, farm other labor income, and farm net interest.

Note.—The industry classification of wage and salary disbursements and proprietors' income is on an establishment basis and is based on the 1972 Standard Industrial Classification (SIC) beginning 1948 and on the 1942 SIC prior to 1948.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-25.—*Disposition of personal income, 1929–85*

[Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates]

Year or quarter	Personal income	Less: Personal tax and nontax payments	Equals: Disposable personal income	Less: Personal outlays				Equals: Personal saving	Percent of disposable personal income		
									Personal outlays		
				Total	Personal consumption expenditures	Interest paid by consumers to business	Personal transfer payments to foreigners (net)		Total	Personal consumption expenditures	Personal saving
1929	84.3	2.6	81.7	79.2	77.3	1.5	0.3	2.6	96.8	94.5	3.2
1933	46.3	1.4	44.9	46.5	45.8	.5	.2	−1.6	103.6	102.1	−3.6
1939	72.1	2.4	69.7	67.9	67.0	.7	.2	1.8	97.4	96.2	2.6
1940	77.6	2.6	75.0	72.0	71.0	.8	.2	3.0	96.0	94.7	4.0
1941	95.2	3.3	91.9	81.9	80.8	.9	.2	10.0	89.1	87.9	10.9
1942	122.4	5.9	116.4	89.5	88.6	.7	.1	27.0	76.8	76.1	23.2
1943	150.7	17.8	132.9	100.2	99.5	.5	.2	32.7	75.4	74.8	24.6
1944	164.5	18.9	145.6	109.0	108.2	.5	.4	36.5	74.9	74.4	25.1
1945	170.0	20.8	149.2	120.5	119.6	.5	.5	28.7	80.8	80.2	19.2
1946	177.6	18.7	158.9	145.3	143.9	.7	.7	13.6	91.4	90.6	8.6
1947	190.2	21.4	168.8	163.6	161.9	1.0	.7	5.2	96.9	95.9	3.1
1948	209.2	21.0	188.1	177.0	174.9	1.4	.7	11.1	94.1	93.0	5.9
1949	206.4	18.5	187.9	180.6	178.3	1.7	.5	7.4	96.1	94.9	3.9
1950	228.1	20.6	207.5	194.8	192.1	2.3	.4	12.6	93.9	92.6	6.1
1951	256.5	28.9	227.6	211.0	208.1	2.5	.4	16.6	92.7	91.4	7.3
1952	273.8	34.0	239.8	222.4	219.1	2.9	.4	17.4	92.7	91.4	7.3
1953	290.5	35.5	255.1	236.7	232.6	3.6	.5	18.4	92.8	91.2	7.2
1954	293.0	32.5	260.5	244.1	239.8	3.8	.5	16.4	93.7	92.0	6.3
1955	314.2	35.4	278.8	262.8	257.9	4.4	.4	16.0	94.2	92.5	5.8
1956	337.2	39.7	297.5	276.2	270.6	5.1	.5	21.3	92.8	90.9	7.2
1957	356.3	42.4	313.9	291.2	285.3	5.5	.5	22.7	92.8	90.9	7.2
1958	367.1	42.2	324.9	300.6	294.6	5.6	.4	24.3	92.5	90.7	7.5
1959	390.7	46.1	344.6	322.8	316.3	6.1	.4	21.8	93.7	91.8	6.3
1960	409.4	50.5	358.9	338.1	330.7	7.0	.4	20.8	94.2	92.1	5.8
1961	426.0	52.2	373.8	348.9	341.1	7.3	.5	24.9	93.4	91.3	6.6
1962	453.2	57.0	396.2	370.2	361.9	7.8	.5	25.9	93.5	91.4	6.5
1963	476.3	60.5	415.8	391.2	381.7	8.8	.6	24.6	94.1	91.8	5.9
1964	510.2	58.8	451.4	419.9	409.3	9.9	.7	31.5	93.0	90.7	7.0
1965	552.0	65.2	486.8	452.5	440.7	11.1	.7	34.3	93.0	90.5	7.0
1966	600.8	74.9	525.9	489.9	477.3	12.0	.7	36.0	93.2	90.8	6.8
1967	644.5	82.4	562.1	516.9	503.6	12.5	.9	45.1	92.0	89.6	8.0
1968	707.2	97.7	609.6	567.1	552.5	13.8	.9	42.5	93.0	90.6	7.0
1969	772.9	116.3	656.7	614.5	597.9	15.6	1.0	42.2	93.6	91.0	6.4
1970	831.8	116.2	715.6	657.9	640.0	16.7	1.2	57.7	91.9	89.4	8.1
1971	894.0	117.3	776.8	710.5	691.6	17.7	1.2	66.3	91.5	89.0	8.5
1972	981.6	142.0	839.6	778.2	757.6	19.5	1.1	61.4	92.7	90.2	7.3
1973	1,101.7	152.0	949.8	860.8	837.2	22.3	1.3	89.0	90.6	88.2	9.4
1974	1,210.1	171.8	1,038.4	941.7	916.5	24.1	1.0	96.7	90.7	88.3	9.3
1975	1,313.4	170.6	1,142.8	1,038.2	1,012.8	24.4	1.0	104.6	90.8	88.6	9.2
1976	1,451.4	198.7	1,252.6	1,156.9	1,129.3	26.6	1.0	95.8	92.4	90.2	7.6
1977	1,607.5	228.1	1,379.3	1,288.6	1,257.2	30.5	.9	90.7	93.4	91.1	6.6
1978	1,812.4	261.1	1,551.2	1,441.1	1,403.5	36.7	.9	110.2	92.9	90.5	7.1
1979	2,034.0	304.7	1,729.3	1,611.3	1,566.8	43.5	1.0	118.1	93.2	90.6	6.8
1980	2,258.5	340.5	1,918.0	1,781.1	1,732.6	47.4	1.1	136.9	92.9	90.3	7.1
1981	2,520.9	393.3	2,127.6	1,968.1	1,915.1	52.0	1.0	159.4	92.5	90.0	7.5
1982	2,670.8	409.3	2,261.4	2,107.5	2,050.7	55.5	1.3	153.9	93.2	90.7	6.8
1983	2,836.4	411.1	2,425.4	2,292.2	2,229.3	61.8	1.0	133.2	94.5	91.9	5.5
1984	3,111.9	441.8	2,670.2	2,497.7	2,423.0	73.3	1.3	172.5	93.5	90.7	6.5
1985 p	3,294.2	493.1	2,801.1	2,671.4	2,581.9	87.4	2.1	129.7	95.4	92.2	4.6
1982: I	2,614.3	407.1	2,207.2	2,052.2	1,996.3	54.6	1.3	155.0	93.0	90.4	7.0
II	2,655.9	414.1	2,241.8	2,080.1	2,023.8	55.0	1.4	161.7	92.8	90.3	7.2
III	2,683.6	405.0	2,278.6	2,122.6	2,065.6	55.8	1.2	156.0	93.2	90.7	6.8
IV	2,729.2	411.1	2,318.1	2,174.9	2,117.0	56.8	1.1	143.1	93.8	91.3	6.2
1983: I	2,752.8	407.4	2,345.5	2,205.2	2,146.0	58.3	.9	140.3	94.0	91.5	6.0
II	2,805.7	418.0	2,387.7	2,271.3	2,210.1	60.2	1.0	116.4	95.1	92.6	4.9
III	2,852.4	404.4	2,447.9	2,319.0	2,254.9	63.0	1.1	129.0	94.7	92.1	5.3
IV	2,934.8	414.4	2,520.4	2,373.3	2,306.3	65.9	1.2	147.1	94.2	91.5	5.8
1984: I	3,033.8	423.6	2,610.2	2,428.7	2,358.6	68.6	1.4	181.6	93.0	90.4	7.0
II	3,083.5	433.6	2,649.9	2,487.4	2,414.4	71.7	1.2	162.6	93.9	91.1	6.1
III	3,144.2	447.5	2,696.7	2,515.2	2,439.0	75.1	1.2	181.5	93.3	90.4	6.7
IV	3,186.2	462.4	2,723.8	2,559.4	2,480.1	77.8	1.5	164.5	94.0	91.1	6.0
1985: I	3,240.9	501.7	2,739.2	2,608.4	2,525.0	81.2	2.1	130.9	95.2	92.2	4.8
II	3,280.1	462.4	2,817.7	2,650.6	2,563.3	85.4	1.8	167.2	94.1	91.0	5.9
III	3,298.5	498.2	2,800.2	2,697.6	2,606.1	89.3	2.2	102.6	96.3	93.1	3.7
IV p	3,357.4	510.1	2,847.2	2,729.2	2,633.3	93.8	2.1	118.1	95.9	92.5	4.1

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–26.—*Total and per capita disposable personal income and personal consumption expenditures in current and 1982 dollars, 1929–85*

[Quarterly data at seasonally adjusted annual rates, except as noted]

Year or quarter	Disposable personal income				Personal consumption expenditures				Population (thousands)[1]
	Total (billions of dollars)		Per capita (dollars)		Total (billions of dollars)		Per capita (dollars)		
	Current dollars	1982 dollars	Current dollars	1982 dollars	Current dollars	1982 dollars	Current dollars	1982 dollars	
1929	81.7	498.6	671	4,091	77.3	471.4	634	3,868	121,878
1933	44.9	370.8	357	2,950	45.8	378.7	365	3,013	125,690
1939	69.7	499.5	532	3,812	67.0	480.5	511	3,667	131,028
1940	75.0	530.7	568	4,017	71.0	502.6	538	3,804	132,122
1941	91.9	604.1	689	4,528	80.8	531.1	606	3,981	133,402
1942	116.4	693.0	863	5,138	88.6	527.6	657	3,912	134,860
1943	132.9	721.4	972	5,276	99.5	539.9	727	3,949	136,739
1944	145.6	749.3	1,052	5,414	108.2	557.1	782	4,026	138,397
1945	149.2	739.5	1,066	5,285	119.6	592.7	855	4,236	139,928
1946	158.9	723.3	1,124	5,115	143.9	655.0	1,018	4,632	141,389
1947	168.8	694.8	1,171	4,820	161.9	666.6	1,123	4,625	144,126
1948	188.1	733.1	1,283	5,000	174.9	681.8	1,193	4,650	146,631
1949	187.9	733.2	1,260	4,915	178.3	695.4	1,195	4,661	149,188
1950	207.5	791.8	1,368	5,220	192.1	733.2	1,267	4,834	151,684
1951	227.6	819.0	1,475	5,308	208.1	748.7	1,349	4,853	154,287
1952	239.8	844.3	1,528	5,379	219.1	771.4	1,396	4,915	156,954
1953	255.1	880.0	1,599	5,515	232.6	802.5	1,458	5,029	159,565
1954	260.5	894.0	1,604	5,505	239.8	822.7	1,477	5,066	162,391
1955	278.8	944.5	1,687	5,714	257.9	873.8	1,560	5,287	165,275
1956	297.5	989.4	1,769	5,881	270.6	899.8	1,608	5,349	168,221
1957	313.9	1,012.1	1,833	5,909	285.3	919.7	1,666	5,370	171,274
1958	324.9	1,028.8	1,865	5,908	294.6	932.9	1,692	5,357	174,141
1959	344.6	1,067.2	1,946	6,027	316.3	979.4	1,786	5,531	177,073
1960	358.9	1,091.1	1,986	6,036	330.7	1,005.1	1,829	5,561	180,760
1961	373.8	1,123.2	2,034	6,113	341.1	1,025.2	1,857	5,579	183,742
1962	396.2	1,170.2	2,123	6,271	361.9	1,069.0	1,940	5,729	186,590
1963	415.8	1,207.3	2,197	6,378	381.7	1,108.4	2,017	5,855	189,300
1964	451.4	1,291.0	2,352	6,727	409.3	1,170.6	2,133	6,099	191,927
1965	486.8	1,365.7	2,505	7,027	440.7	1,236.4	2,268	6,362	194,347
1966	525.9	1,431.3	2,675	7,280	477.3	1,298.9	2,428	6,607	196,599
1967	562.1	1,493.2	2,828	7,513	503.6	1,337.7	2,534	6,730	198,752
1968	609.6	1,551.3	3,037	7,728	552.5	1,405.9	2,752	7,003	200,745
1969	656.7	1,599.8	3,239	7,891	597.9	1,456.7	2,949	7,185	202,736
1970	715.6	1,668.1	3,489	8,134	640.0	1,492.0	3,121	7,275	205,089
1971	776.8	1,728.4	3,740	8,322	691.6	1,538.8	3,330	7,409	207,692
1972	839.6	1,797.4	4,000	8,562	757.6	1,621.9	3,609	7,726	209,924
1973	949.8	1,916.3	4,481	9,042	837.2	1,689.6	3,950	7,972	211,939
1974	1,038.4	1,896.6	4,855	8,867	916.5	1,674.0	4,285	7,826	213,898
1975	1,142.8	1,931.7	5,291	8,944	1,012.8	1,711.9	4,689	7,926	215,981
1976	1,252.6	2,001.0	5,744	9,175	1,129.3	1,803.9	5,178	8,272	218,086
1977	1,379.3	2,066.6	6,262	9,381	1,257.2	1,883.8	5,707	8,551	220,289
1978	1,551.2	2,167.4	6,968	9,735	1,403.5	1,961.0	6,304	8,808	222,629
1979	1,729.3	2,212.6	7,682	9,829	1,566.8	2,004.4	6,960	8,904	225,106
1980	1,918.0	2,214.3	8,422	9,723	1,732.6	2,000.4	7,608	8,784	227,732
1981	2,127.6	2,248.6	9,247	9,773	1,915.1	2,024.2	8,324	8,798	230,087
1982	2,261.4	2,261.5	9,732	9,732	2,050.7	2,050.7	8,825	8,825	232,376
1983	2,425.4	2,334.6	10,339	9,952	2,229.3	2,145.9	9,503	9,148	234,579
1984	2,670.2	2,468.4	11,279	10,427	2,423.0	2,239.9	10,235	9,462	236,731
1985 p	2,801.1	2,509.0	11,727	10,504	2,581.9	2,312.6	10,810	9,682	238,849
1982: I	2,207.2	2,245.7	9,533	9,700	1,996.3	2,031.2	8,623	8,773	231,520
II	2,241.8	2,260.9	9,661	9,743	2,023.8	2,041.0	8,721	8,795	232,050
III	2,278.6	2,263.4	9,793	9,728	2,065.6	2,051.8	8,878	8,819	232,667
IV	2,318.1	2,276.1	9,937	9,758	2,117.0	2,078.7	9,075	8,911	233,268
1983: I	2,345.5	2,291.3	10,033	9,802	2,146.0	2,096.4	9,180	8,968	233,772
II	2,387.7	2,309.0	10,192	9,856	2,210.1	2,137.2	9,434	9,123	234,268
III	2,447.9	2,346.9	10,423	9,993	2,254.9	2,161.8	9,601	9,205	234,850
IV	2,520.4	2,391.3	10,706	10,157	2,306.3	2,188.1	9,796	9,294	235,425
1984: I	2,610.2	2,446.8	11,064	10,371	2,358.6	2,210.9	9,997	9,371	235,924
II	2,649.9	2,461.8	11,209	10,413	2,414.4	2,243.0	10,212	9,488	236,419
III	2,696.7	2,480.5	11,379	10,466	2,439.0	2,243.4	10,291	9,466	236,998
IV	2,723.8	2,484.4	11,465	10,457	2,480.1	2,262.0	10,439	9,521	237,584
1985: I	2,739.2	2,482.7	11,506	10,429	2,525.0	2,288.6	10,606	9,613	238,065
II	2,817.7	2,532.2	11,814	10,617	2,563.3	2,303.5	10,747	9,658	238,503
III	2,800.2	2,503.1	11,710	10,468	2,606.1	2,329.6	10,898	9,742	239,126
IV p	2,847.2	2,517.9	11,878	10,504	2,633.3	2,328.7	10,986	9,715	239,703

[1] Population of the United States including Armed Forces overseas; includes Alaska and Hawaii beginning 1960. Annual data are for July 1 through 1958 and are averages of quarterly data beginning 1959. Quarterly data are averages for the period.

Source: Department of Commerce (Bureau of Economic Analysis and Bureau of the Census).

TABLE B-27.—*Gross saving and investment, 1929–85*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Gross saving								Gross investment			Statistical discrepancy
	Total	Gross private saving			Government surplus or deficit (−), national income and product accounts			Capital grants received by the United States (net)[2]	Total	Gross private domestic investment	Net foreign investment[3]	
		Total	Personal saving	Gross business saving[1]	Total	Federal	State and local					
1929	15.9	14.9	2.6	12.3	1.0	1.2	−0.2	…	17.4	16.7	0.8	1.5
1933	.9	2.2	−1.6	3.8	−1.4	−1.3	−.1	…	1.7	1.6	.2	1.2
1939	8.8	11.0	1.8	9.2	−2.2	−2.2	.0	…	10.6	9.5	1.0	1.7
1940	13.5	14.2	3.0	11.2	−.7	−1.3	.6	…	15.0	13.4	1.5	1.4
1941	18.6	22.4	10.0	12.4	−3.8	−5.1	1.3	…	19.5	18.3	1.3	.7
1942	10.6	42.0	27.0	15.0	−31.4	−33.1	1.8	…	10.2	10.3	−.1	−.7
1943	5.8	50.0	32.7	17.3	−44.2	−46.6	2.4	…	4.1	6.2	−2.1	−1.7
1944	3.0	54.9	36.5	18.4	−51.8	−54.5	2.7	…	5.8	7.7	−2.0	2.7
1945	5.9	45.4	28.7	16.8	−39.5	−42.1	2.6	…	10.0	11.3	−1.3	4.0
1946	35.7	30.3	13.6	16.7	5.4	3.5	1.9	…	36.4	31.5	4.9	.7
1947	42.5	28.1	5.2	23.0	14.4	13.4	1.0	…	44.3	35.0	9.3	1.8
1948	50.8	42.4	11.1	31.3	8.4	8.3	.1	…	49.6	47.1	2.4	−1.3
1949	36.5	39.9	7.4	32.5	−3.4	−2.6	−.7	…	37.3	36.5	.9	.8
1950	52.5	44.5	12.6	31.8	8.0	9.2	−1.2	…	53.2	55.1	−1.8	.8
1951	58.7	52.6	16.6	36.0	6.1	6.5	−.4	…	61.4	60.5	.9	2.7
1952	52.3	56.1	17.4	38.7	−3.8	−3.7	.0	…	54.2	53.5	.6	1.8
1953	51.0	58.0	18.4	39.6	−7.0	−7.1	.1	…	53.6	54.9	−1.3	2.6
1954	51.6	58.8	16.4	42.3	−7.1	−6.0	−1.1	…	54.3	54.1	.2	2.7
1955	68.4	65.2	16.0	49.2	3.1	4.4	−1.3	…	70.2	69.7	.4	1.8
1956	77.3	72.1	21.3	50.8	5.2	6.1	−.9	…	75.4	72.7	2.8	−1.9
1957	77.1	76.1	22.7	53.5	.9	2.3	−1.4	…	75.9	71.1	4.8	−1.2
1958	64.5	77.1	24.3	52.9	−12.6	−10.3	−2.4	…	64.5	63.6	.9	−.1
1959	80.5	82.1	21.8	60.3	−1.6	−1.1	−.4	…	79.0	80.2	−1.2	−1.5
1960	84.2	81.1	20.8	60.3	3.1	3.0	.1	…	81.4	78.2	3.2	−2.8
1961	82.6	86.8	24.9	62.0	−4.3	−3.9	−.4	…	81.3	77.1	4.2	−1.2
1962	91.4	95.2	25.9	69.3	−3.8	−4.2	.5	…	91.5	87.6	3.8	.0
1963	98.7	97.9	24.6	73.3	.7	.3	.5	…	98.1	93.1	4.9	−.6
1964	108.5	110.8	31.5	79.3	−2.3	−3.3	1.0	…	107.1	99.6	7.5	−1.4
1965	123.5	123.0	34.3	88.7	.5	.5	.0	…	122.3	116.2	6.2	−1.2
1966	130.3	131.6	36.0	95.6	−1.3	−1.8	.5	…	132.4	128.6	3.8	2.1
1967	129.5	143.8	45.1	98.6	−14.2	−13.2	−1.1	…	129.2	125.7	3.5	−.4
1968	139.7	145.7	42.5	103.3	−6.0	−6.0	.1	…	138.6	137.0	1.6	−1.1
1969	158.8	148.9	42.2	106.7	9.9	8.4	1.5	…	154.9	153.2	1.7	−3.9
1970	154.7	164.5	57.7	106.7	−10.6	−12.4	1.8	0.9	153.6	148.8	4.8	−1.1
1971	171.9	190.6	66.3	124.3	−19.5	−22.0	2.6	.7	173.7	172.5	1.3	1.8
1972	200.7	203.4	61.4	142.0	−3.4	−16.8	13.5	.7	199.1	202.0	−2.9	−1.6
1973	251.9	244.0	89.0	155.0	7.9	−5.6	13.5	.0	247.6	238.8	8.8	−4.3
1974	247.9	254.3	96.7	157.6	−4.3	−11.6	7.2	[4] −2.0	246.2	240.8	5.4	−1.7
1975	238.7	303.6	104.6	198.9	−64.9	−69.4	4.5	.0	241.2	219.6	21.6	2.5
1976	283.0	321.4	95.8	225.6	−38.4	−53.5	15.2	.0	286.6	277.7	9.0	3.6
1977	335.4	354.5	90.7	263.8	−19.1	−46.0	26.9	.0	335.3	344.1	−8.7	.0
1978	408.6	409.0	110.2	298.9	−.4	−29.3	28.9	.0	406.7	416.8	−10.1	−1.9
1979	458.4	445.8	118.1	327.7	11.5	−16.1	27.6	1.1	457.4	454.8	2.6	−1.0
1980	445.0	478.4	136.9	341.5	−34.5	−61.3	26.8	1.2	449.9	437.0	13.0	4.9
1981	522.0	550.5	159.4	391.1	−29.7	−63.8	34.1	1.1	526.1	515.5	10.6	4.1
1982	446.4	557.1	153.9	403.2	−110.8	−145.9	35.1	.0	446.3	447.3	−1.0	−.1
1983	469.8	600.6	133.2	467.4	−130.8	−179.4	48.6	.0	469.2	501.9	−32.7	−.6
1984	584.5	693.0	172.5	520.5	−108.5	−172.9	64.4	.0	583.0	674.0	−91.0	−1.5
1985[p]	558.7	697.7	129.7	568.0	−139.0	−197.3	58.3	.0	559.4	670.4	−111.0	.7
1982: I	471.6	547.6	155.0	392.6	−76.0	−109.2	33.2	.0	466.8	459.5	7.3	−4.8
II	483.4	561.1	161.7	399.4	−77.7	−112.9	35.2	.0	484.4	467.8	16.5	1.0
III	443.1	565.7	156.0	409.7	−122.5	−158.8	36.3	.0	439.9	452.2	−12.3	−3.2
IV	387.4	554.2	143.1	411.1	−166.8	−202.6	35.8	.0	394.2	409.6	−15.4	6.8
1983: I	430.0	580.0	140.3	439.7	−150.0	−187.9	37.9	.0	428.5	425.0	3.6	−1.4
II	451.2	575.0	116.4	458.6	−123.8	−170.6	46.8	.0	455.5	483.7	−28.2	4.3
III	478.5	605.5	129.0	476.5	−127.0	−179.7	52.7	.0	474.2	521.2	−47.0	−4.3
IV	519.8	642.0	147.1	495.0	−122.2	−179.5	57.2	.0	518.6	577.6	−59.0	−1.2
1984: I	590.5	684.3	181.6	502.7	−93.8	−157.8	64.0	.0	593.3	658.8	−65.5	2.8
II	581.3	678.6	162.6	516.0	−97.3	−163.0	65.7	.0	579.4	673.3	−93.9	−1.9
III	592.8	708.8	181.5	527.3	−116.0	−178.1	62.1	.0	593.6	687.9	−94.3	.8
IV	573.5	700.3	164.5	535.8	−126.8	−192.7	65.8	.0	565.8	676.2	−110.4	−7.6
1985: I	578.3	677.7	130.9	546.8	−99.4	−162.6	63.2	.0	580.8	657.6	−76.8	2.5
II	571.7	723.6	167.2	556.4	−151.9	−209.1	57.3	.0	567.0	672.8	−105.8	−4.7
III	537.3	681.8	102.6	579.2	−144.5	−201.3	56.9	.0	539.9	666.1	−126.2	2.5
IV[p]	…	…	118.1	…	…	…	…	.0	549.9	685.2	−135.4	…

[1] Undistributed corporate profits with inventory valuation and capital consumption adjustments, corporate and noncorporate capital consumption allowances with capital consumption adjustment, and private wage accruals less disbursements.

[2] Allocations of special drawing rights (SDRs), except as noted in footnote 4.

[3] Net exports of goods and services less net transfers to foreigners and interest paid by government to foreigners plus capital grants received by the United States, net.

[4] In February 1974, the U.S. Government paid to India $2,010 million in rupees under provisions of the Agricultural Trade Development and Assistance Act. This transaction is being treated as capital grants paid to foreigners, i.e., a −$2.0 billion entry in capital grants received by the United States, net.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-28.—*Saving by individuals, 1946–85* [1]

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Total	Increase in financial assets									Net investment in [7]			Less: Net increase in debt		
		Total	Checkable deposits and currency	Time and savings deposits	Money market fund shares	Securities			Insurance and pension reserves [5]	Other financial assets [6]	Owner-occupied homes	Consumer durables	Noncorporate business assets [8]	Mortgage debt on nonfarm homes	Consumer credit	Other debt [8] [9]
						Government securities [2]	Corporate equities [3]	Other securities [4]								
1946	24.6	18.8	5.6	6.3		−1.5	1.1	−0.9	5.3	2.8	3.6	6.1	2.3	3.6	3.1	−0.4
1947	20.1	13.2	.1	3.4		1.6	1.1	−.8	5.4	2.4	6.7	9.0	1.8	4.7	3.7	2.2
1948	24.3	9.1	−2.9	2.2		1.3	1.0	.0	5.3	2.2	9.1	9.8	6.9	4.6	3.2	2.8
1949	20.9	9.9	−2.0	2.6		1.8	.7	−.4	5.6	1.6	8.4	10.6	1.8	4.4	3.2	2.2
1950	30.6	13.7	2.6	2.4		−.1	.7	−.7	6.9	1.9	11.8	14.8	6.8	6.7	4.8	5.0
1951	34.7	19.1	4.6	4.7		−.6	1.8	.3	6.3	1.9	11.7	11.3	4.5	6.6	1.6	3.7
1952	31.3	23.2	1.6	7.8		2.5	1.6	.0	7.7	2.0	11.3	8.6	2.3	6.2	5.3	2.7
1953	32.5	22.8	1.0	8.1		2.5	1.0	.3	7.9	2.1	12.3	10.1	1.0	7.6	4.2	1.9
1954	28.2	22.2	2.2	9.1		1.0	.8	−.9	7.8	2.1	12.7	7.1	1.9	8.7	1.5	5.5
1955	34.1	28.0	1.2	8.6		5.8	1.0	.8	8.5	2.1	16.7	12.2	2.9	12.2	7.2	6.4
1956	37.2	30.2	1.8	9.4		3.9	2.0	1.2	9.5	2.5	15.6	8.5	1.2	11.2	3.9	3.2
1957	36.5	28.6	−.4	11.9		2.3	1.5	1.0	9.5	2.8	13.2	7.7	2.7	8.9	2.9	3.8
1958	34.1	31.6	3.8	13.9		−2.5	1.5	1.1	10.4	3.5	12.3	3.6	2.6	9.5	.5	6.0
1959	38.0	37.4	1.0	11.0		10.1	.5	−.3	11.9	3.3	16.3	7.3	5.0	12.8	8.0	7.2
1960	36.7	32.1	1.0	12.0		2.2	−.6	2.4	11.5	3.6	14.8	7.0	3.6	11.7	4.4	4.9
1961	35.9	35.4	−.9	18.3		1.4	.3	.1	12.1	4.3	12.7	4.3	4.7	12.2	2.5	6.5
1962	42.0	40.1	−1.2	26.1		1.3	−2.1	.1	12.7	3.2	13.5	8.5	7.5	14.1	6.3	7.2
1963	46.7	46.6	4.2	26.2		.6	−2.6	1.4	13.9	2.9	14.3	11.8	9.8	16.2	8.9	10.7
1964	56.8	55.7	5.3	26.1		4.8	−.2	.4	16.1	3.2	15.0	15.0	9.2	17.5	9.8	10.8
1965	65.0	58.8	7.6	27.8		3.7	−2.1	1.3	16.9	3.7	14.5	20.2	13.3	17.0	10.6	14.3
1966	72.4	57.5	2.4	19.0		11.3	−.7	2.4	19.2	4.0	13.5	23.1	10.8	13.8	6.5	12.2
1967	76.9	69.7	9.9	35.3		−1.2	−4.7	5.2	18.6	6.6	11.7	21.1	10.2	12.5	5.7	17.6
1968	80.0	75.0	11.1	31.1		5.2	−7.5	7.9	19.8	7.6	15.7	27.0	10.0	16.9	11.5	19.2
1969	71.4	65.0	−2.5	9.1		25.9	−2.8	10.0	21.5	3.9	16.3	26.3	12.7	18.6	10.8	19.4
1970	86.2	81.3	8.9	43.6		−5.4	−1.7	6.9	23.9	5.2	13.6	20.0	11.5	14.1	5.4	20.7
1971	95.4	101.9	12.3	67.7		−12.2	−5.5	6.5	27.4	5.6	20.7	26.6	17.5	26.2	14.7	30.3
1972	108.8	131.1	13.7	74.2		.7	−5.4	2.4	34.3	11.2	28.0	34.6	20.6	41.4	19.8	44.2
1973	133.4	150.3	14.1	62.6		22.1	−6.2	8.6	38.8	10.3	31.0	40.4	26.6	46.5	24.3	44.2
1974	127.2	147.2	7.3	51.1	2.4	25.6	−.9	3.6	47.0	11.1	25.2	28.4	10.6	38.0	9.9	36.3
1975	151.7	174.4	6.9	84.2	1.3	17.7	−4.7	.3	54.9	13.8	24.2	26.5	5.0	40.6	9.6	28.3
1976	163.0	210.3	15.7	106.2	.0	8.3	−5.0	6.0	60.1	19.2	39.2	40.0	.2	61.4	25.4	39.9
1977	166.5	235.7	19.9	108.2	.2	17.0	−4.0	3.7	71.8	18.9	54.4	49.6	13.1	90.8	40.2	55.3
1978	190.5	274.2	22.5	102.1	6.9	29.5	−5.4	1.8	86.6	30.2	67.0	56.7	22.0	112.9	48.8	67.7
1979	197.2	293.2	21.5	74.4	34.4	45.7	−18.8	5.2	95.1	36.0	68.2	52.5	26.0	123.0	45.4	74.6
1980	235.1	319.7	10.2	126.5	29.2	23.8	−8.3	−11.8	116.0	34.1	56.2	32.8	−.3	95.4	4.7	73.3
1981	290.2	356.2	31.8	66.7	107.5	41.8	−29.7	−11.2	118.2	31.2	47.6	39.1	24.1	74.4	22.7	79.7
1982	293.5	365.2	16.9	119.2	24.7	35.1	−5.7	−4.6	147.2	32.4	24.1	35.5	11.9	49.5	20.1	73.5
1983	281.7	437.2	43.3	198.8	−44.1	84.4	6.0	−13.4	144.2	17.9	54.9	61.5	.3	110.1	59.8	102.5
1984	370.5	521.1	29.3	216.8	47.2	117.6	−41.6	−10.4	135.0	27.2	74.7	85.2	22.1	138.5	96.5	97.5
1983: I	307.2	424.3	62.6	252.3	−105.2	63.1	2.9	2.0	135.3	11.2	36.5	44.8	1.7	73.9	34.2	92.0
II	253.7	414.3	73.0	158.7	−62.7	138.9	−1.9	−62.8	147.7	23.4	49.9	60.2	−1.9	100.9	54.0	114.0
III	260.5	423.0	13.4	199.8	−6.5	77.2	−11.0	−5.6	144.0	11.8	63.7	65.1	−6.9	124.4	57.1	102.9
IV	305.5	487.3	24.1	184.6	−1.8	58.6	34.0	12.9	149.9	25.1	69.7	75.9	8.5	141.1	93.8	101.0
1984: I	333.7	450.7	37.7	200.4	44.9	73.6	−29.0	−18.4	124.7	16.9	70.6	83.0	28.9	132.7	78.8	87.9
II	358.0	548.7	35.9	233.3	15.4	166.4	−55.4	−10.0	130.5	32.7	75.8	89.4	17.4	150.4	125.4	97.5
III	396.4	527.9	4.8	225.1	20.5	157.0	−40.6	1.2	128.3	31.6	77.4	81.4	21.7	134.5	90.2	87.4
IV	394.0	556.9	38.8	208.5	107.9	73.6	−41.2	−14.6	156.5	27.4	75.0	86.9	20.2	136.6	91.5	117.0
1985: I	317.8	473.8	6.9	177.5	−12.1	66.8	−43.3	124.6	134.6	18.9	73.4	91.3	16.6	129.0	121.3	87.1
II	333.7	501.9	72.3	114.9	20.4	120.2	18.6	−53.8	181.3	28.0	76.4	91.9	16.9	141.3	112.1	100.1
III	319.3	491.3	119.6	94.3	−21.2	93.2	.3	10.2	183.6	11.3	77.4	105.5	10.7	148.7	115.2	101.6

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[1] Saving by households, personal trust funds, nonprofit institutions, farms, and other noncorporate business.

[2] Consists of U.S. savings bonds, other U.S. Treasury securities, U.S. Government agency securities and sponsored agency securities, mortgage pool securities, and State and local obligations.

[3] Includes mutual fund shares.

[4] Corporate and foreign bonds and open market paper.

[5] Private life insurance reserves, private insured and noninsured pension reserves, and government insurance and pension reserves.

[6] Consists of security credit, mortgages, accident and health insurance reserves, and nonlife insurance claims for households and of consumer credit, equity in sponsored agencies, and nonlife insurance claims for noncorporate business.

[7] Purchases of physical assets less depreciation.

[8] Includes data for corporate farms.

[9] Other debt consists of security credit, policy loans, and noncorporate business debt.

Source: Board of Governors of the Federal Reserve System.

TABLE B-29.—*Number and median income (in 1984 dollars) of families and persons, and poverty status, by race, selected years, 1960–84*

Year	Families [1]						Persons below poverty level		Median income of persons 14 years old and over with income [2]			
	Number (millions)	Median income	Below poverty level				Number (millions)	Rate	Males		Females	
			Total		Female householder				All persons	Year-round full-time workers	All persons	Year-round full-time workers
			Number (millions)	Rate	Number (millions)	Rate						
ALL RACES												
1960	45.5	$19,711	8.2	18.1	2.0	42.4	39.9	22.2	$14,311	$19,060	$4,424	$11,558
1961	46.4	19,912	8.4	18.1	2.0	42.1	39.6	21.9	14,545	19,662	4,442	11,601
1962	47.1	20,452	8.1	17.2	2.0	42.9	38.6	21.0	15,012	20,007	4,608	11,872
1963	47.5	21,200	7.6	15.9	2.0	40.4	36.4	19.5	15,303	20,595	4,655	12,064
1964	48.0	21,998	7.2	15.0	1.8	36.4	36.1	19.0	15,561	21,042	4,852	12,425
1965	48.5	22,903	6.7	13.9	1.9	38.4	33.2	17.3	16,536	21,721	5,007	12,564
1966 [3]	49.2	24,107	5.8	11.8	1.7	33.1	28.5	14.7	16,982	22,261	5,244	12,885
1967	50.1	24,680	5.7	11.4	1.8	33.3	27.8	14.2	17,275	22,676	5,603	13,060
1968	50.8	25,772	5.0	10.0	1.8	32.3	25.4	12.8	17,854	23,330	6,028	13,638
1969	51.6	26,727	5.0	9.7	1.8	32.7	24.1	12.1	18,215	24,559	6,041	14,385
1970	52.2	26,394	5.3	10.1	2.0	32.5	25.4	12.6	17,842	24,567	5,984	14,552
1971	53.3	26,378	5.3	10.0	2.1	33.9	25.6	12.5	17,704	24,701	6,176	14,621
1972	54.4	27,599	5.1	9.3	2.2	32.7	24.5	11.9	18,497	26,164	6,453	15,029
1973	55.1	28,167	4.8	8.8	2.2	32.2	23.0	11.1	18,830	26,805	6,535	15,165
1974 [3]	55.7	27,175	4.9	8.8	2.3	32.1	23.4	11.2	17,802	25,617	6,492	15,111
1975	56.2	26,476	5.5	9.7	2.4	32.5	25.9	12.3	17,085	24,961	6,533	14,897
1976	56.7	27,293	5.3	9.4	2.5	33.0	25.0	11.8	17,199	25,288	6,525	15,166
1977	57.2	27,440	5.3	9.3	2.6	31.7	24.7	11.6	17,351	25,831	6,755	15,108
1978	57.8	28,085	5.3	9.1	2.7	31.4	24.5	11.4	17,410	25,573	6,477	15,350
1979 [4]	59.6	28,029	5.5	9.2	2.6	30.4	26.1	11.7	16,856	25,012	6,228	15,070
1980	60.3	26,500	6.2	10.3	3.0	32.7	29.3	13.0	15,795	24,168	6,202	14,611
1981	61.0	25,569	6.9	11.2	3.3	34.6	31.8	14.0	15,387	23,632	6,233	14,227
1982	61.4	25,216	7.5	12.2	3.4	36.3	34.4	15.0	15,012	23,303	6,335	14,703
1983	62.0	25,724	7.6	12.3	3.6	36.0	35.3	15.2	15,285	23,464	6,678	15,105
1984	62.7	26,433	7.3	11.6	3.5	34.5	33.7	14.4	15,600	24,004	6,868	15,422
WHITE												
1970	46.5	27,381	3.7	8.0	1.1	25.0	17.5	9.9	18,754	25,271	6,062	14,809
1971	47.6	27,371	3.8	7.9	1.2	26.5	17.8	9.9	18,561	25,396	6,278	14,791
1972	48.5	28,674	3.4	7.1	1.1	24.3	16.2	9.0	19,401	27,108	6,495	15,324
1973	48.9	29,439	3.2	6.6	1.2	24.5	15.1	8.4	19,758	27,581	6,598	15,422
1974 [3]	49.4	28,241	3.4	6.8	1.3	24.8	15.7	8.6	18,649	26,116	6,565	15,239
1975	49.9	27,536	3.8	7.7	1.4	25.9	17.8	9.7	17,948	25,538	6,600	14,932
1976	50.1	28,349	3.6	7.1	1.4	25.2	16.7	9.1	18,131	26,041	6,580	15,283
1977	50.5	28,693	3.5	7.0	1.4	24.0	16.4	8.9	18,174	26,359	6,858	15,204
1978	50.9	29,244	3.5	6.9	1.4	23.5	16.3	8.7	18,235	26,047	6,555	15,494
1979 [4]	52.2	29,248	3.6	6.9	1.4	22.3	17.2	9.0	17,608	25,735	6,286	15,202
1980	52.7	27,611	4.2	8.0	1.6	25.7	19.7	10.2	16,800	24,858	6,236	14,752
1981	53.3	26,858	4.7	8.8	1.8	27.4	21.6	11.1	16,327	24,187	6,303	14,464
1982	53.4	26,475	5.1	9.6	1.8	27.9	23.5	12.0	15,870	23,924	6,421	14,901
1983	53.9	26,937	5.2	9.7	1.9	28.3	24.0	12.1	16,080	24,090	6,794	15,307
1984	54.4	27,686	4.9	9.1	1.9	27.1	23.0	11.5	16,467	24,826	6,949	15,575
BLACK												
1970	4.9	16,796	1.5	29.5	.8	54.3	7.5	33.5	11,120	17,213	5,518	12,134
1971	5.2	16,517	1.5	28.8	.9	53.5	7.4	32.5	11,069	17,366	5,501	13,060
1972	5.3	17,042	1.5	29.0	1.0	53.3	7.7	33.3	11,751	18,306	6,068	13,109
1973	5.4	16,990	1.5	28.1	1.0	52.7	7.4	31.4	11,951	18,589	5,956	13,077
1974 [3]	5.5	16,863	1.5	26.9	1.0	52.2	7.2	30.3	11,555	18,710	5,927	14,064
1975	5.6	16,943	1.5	27.1	1.0	50.1	7.5	31.3	10,730	19,006	5,996	14,266
1976	5.8	16,863	1.6	27.9	1.1	52.2	7.6	31.1	10,917	18,651	6,200	14,289
1977	5.8	16,391	1.6	28.2	1.2	51.0	7.7	31.3	10,785	18,172	5,922	14,209
1978	5.9	17,321	1.6	27.5	1.2	50.6	7.6	30.6	10,924	19,949	5,902	14,361
1979 [4]	6.2	16,562	1.7	27.8	1.2	49.4	8.1	31.0	10,900	18,547	5,721	13,929
1980	6.3	15,976	1.8	28.9	1.3	49.4	8.6	32.5	10,096	17,490	5,773	13,759
1981	6.4	15,151	2.0	30.8	1.4	52.9	9.2	34.2	9,709	17,113	5,600	13,063
1982	6.5	14,633	2.2	33.0	1.5	56.2	9.7	35.6	9,511	16,992	5,664	13,318
1983	6.7	15,181	2.2	32.3	1.5	53.7	9.9	35.7	9,404	17,176	5,806	13,588
1984	6.8	15,432	2.1	30.9	1.5	51.7	9.5	33.8	9,448	16,943	6,164	14,036

[1] The term "family" refers to a group of two or more persons related by blood, marriage, or adoption and residing together; all such persons are considered members of the same family. Beginning 1979, based on householder concept and restricted to primary families.

[2] Beginning 1979, data are for persons 15 years and over.

[3] Based on revised methodology; comparable with succeeding years.

[4] Based on 1980 census population controls; comparable with succeeding years.

Note.—The poverty level is based on the poverty index adopted by a Federal interagency committee in 1969. That index reflected different consumption requirements for families based on size and composition, sex and age of family householder, and farm-nonfarm residence. Minor revisions implemented in 1981 eliminated variations in the poverty thresholds based on two of these variables, farm-nonfarm residence and sex of householder. The poverty thresholds are updated every year to reflect changes in the consumer price index. For further details see "Current Population Reports," Series P-60, No. 147.

Source: Department of Commerce, Bureau of the Census.

TABLE B–30.—*Population by age groups, 1929–85*

[Thousands of persons]

July 1	Total	Age (years)						
		Under 5	5-15	16-19	20-24	25-44	45-64	65 and over
1929	121,767	11,734	26,800	9,127	10,694	35,862	21,076	6,474
1933	125,579	10,612	26,897	9,302	11,152	37,319	22,933	7,363
1939	130,880	10,418	25,179	9,822	11,519	39,354	25,823	8,764
1940	132,122	10,579	24,811	9,895	11,690	39,868	26,249	9,031
1941	133,402	10,850	24,516	9,840	11,807	40,383	26,718	9,288
1942	134,860	11,301	24,231	9,730	11,955	40,861	27,196	9,584
1943	136,739	12,016	24,093	9,607	12,064	41,420	27,671	9,867
1944	138,397	12,524	23,949	9,561	12,062	42,016	28,138	10,147
1945	139,928	12,979	23,907	9,361	12,036	42,52	28,630	10,494
1946	141,389	13,244	24,103	9,119	12,004	43,027	29,064	10,828
1947	144,126	14,406	24,468	9,097	11,814	43,657	29,498	11,185
1948	146,631	14,919	25,209	8,952	11,794	44,288	29,931	11,538
1949	149,188	15,607	25,852	8,788	11,700	44,916	30,405	11,921
1950	152,271	16,410	26,721	8,542	11,680	45,672	30,849	12,397
1951	154,878	17,333	27,279	8,446	11,552	46,103	31,362	12,803
1952	157,553	17,312	28,894	8,414	11,350	46,495	31,884	13,203
1953	160,184	17,638	30,227	8,460	11,062	46,786	32,394	13,617
1954	163,026	18,057	31,480	8,637	10,832	47,001	32,942	14,076
1955	165,931	18,566	32,682	8,744	10,714	47,194	33,506	14,525
1956	168,903	19,003	33,994	8,916	10,616	47,379	34,057	14,938
1957	171,984	19,494	35,272	9,195	10,603	47,440	34,591	15,388
1958	174,882	19,887	36,445	9,543	10,756	47,337	35,109	15,806
1959	177,830	20,175	37,368	10,215	10,969	47,192	35,663	16,248
1960	180,671	20,341	38,494	10,683	11,134	47,140	36,203	16,675
1961	183,691	20,522	39,765	11,025	11,483	47,084	36,722	17,089
1962	186,538	20,469	41,205	11,180	11,959	47,013	37,255	17,457
1963	189,242	20,342	41,626	12,007	12,714	46,994	37,782	17,778
1964	191,889	20,165	42,297	12,736	13,269	46,958	38,338	18,127
1965	194,303	19,824	42,938	13,516	13,746	46,912	38,916	18,451
1966	196,560	19,208	43,702	14,311	14,050	47,001	39,534	18,755
1967	198,712	18,563	44,244	14,200	15,248	47,194	40,193	19,071
1968	200,706	17,913	44,622	14,452	15,786	47,721	40,846	19,365
1969	202,677	17,376	44,840	14,800	16,480	48,064	41,437	19,680
1970	205,052	17,166	44,816	15,289	17,202	48,473	41,999	20,107
1971	207,661	17,244	44,591	15,688	18,159	48,936	42,482	20,561
1972	209,896	17,101	44,203	16,039	18,153	50,482	42,898	21,020
1973	211,909	16,851	43,582	16,446	18,521	51,749	43,235	21,525
1974	213,854	16,487	42,989	16,769	18,975	53,051	43,522	22,061
1975	215,973	16,121	42,508	17,017	19,527	54,302	43,801	22,696
1976	218,035	15,617	42,099	17,194	19,986	55,852	44,008	23,278
1977	220,239	15,564	41,298	17,276	20,499	57,561	44,150	23,892
1978	222,585	15,735	40,428	17,288	20,946	59,400	44,286	24,502
1979	225,055	16,063	39,552	17,242	21,297	61,379	44,390	25,134
1980	227,738	16,454	38,839	17,160	21,579	63,488	44,510	25,709
1981	230,043	16,917	38,170	16,769	21,799	65,583	44,546	26,259
1982	232,345	17,279	37,846	16,247	21,780	67,772	44,560	26,861
1983	234,538	17,616	37,630	15,689	21,680	69,826	44,623	27,474
1984	236,681	17,816	37,602	15,121	21,525	71,825	44,752	28,040
1985	238,816							

Note.—Includes Armed Forces overseas beginning 1940. Includes Alaska and Hawaii beginning 1950.

Based on revised methodology, total population for 1980 through 1985 is: 227,757; 230,138; 232,520; 234,799; 237,019; and 239,283, respectively. Detail by age not yet available.

Source: Department of Commerce, Bureau of the Census.

TABLE B-31.—*Population and the labor force, 1929–85*

[Monthly data seasonally adjusted, except as noted]

Period	Civilian noninstitutional population[1]	Resident Armed Forces[1]	Labor force including resident Armed Forces	Employment including resident Armed Forces	Civilian labor force					Unemployment rate		Labor force participation rate	
					Total	Employment			Unemployment	All workers[2]	Civilian workers	Total[3]	Civilian[4]
						Total	Agricultural	Nonagricultural					
	Thousands of persons 14 years of age and over									Percent			
1929					49,180	47,630	10,450	37,180	1,550		3.2		
1933					51,590	38,760	10,090	28,670	12,830		24.9		
1939					55,230	45,750	9,610	36,140	9,480		17.2		
1940	99,840				55,640	47,520	9,540	37,980	8,120		14.6		55.7
1941	99,900				55,910	50,350	9,100	41,250	5,560		9.9		56.0
1942	98,640				56,410	53,750	9,250	44,500	2,660		4.7		57.2
1943	94,640				55,540	54,470	9,080	45,390	1,070		1.9		58.7
1944	93,220				54,630	53,960	8,950	45,010	670		1.2		58.6
1945	94,090				53,860	52,820	8,580	44,240	1,040		1.9		57.2
1946	103,070				57,520	55,250	8,320	46,930	2,270		3.9		55.8
1947	106,018				60,168	57,812	8,256	49,557	2,356		3.9		56.8
	Thousands of persons 16 years of age and over												
1947	101,827				59,350	57,038	7,890	49,148	2,311		3.9		58.3
1948	103,068				60,621	58,343	7,629	50,714	2,276		3.8		58.8
1949	103,994				61,286	57,651	7,658	49,993	3,637		5.9		58.9
1950	104,995	1,169	63,377	60,087	62,208	58,918	7,160	51,758	3,288	5.2	5.3	59.7	59.2
1951	104,621	2,143	64,160	62,104	62,017	59,961	6,726	53,235	2,055	3.2	3.3	60.1	59.2
1952	105,231	2,386	64,524	62,636	62,138	60,250	6,500	53,749	1,883	2.9	3.0	60.0	59.0
1953[5]	107,056	2,231	65,246	63,410	63,015	61,179	6,260	54,919	1,834	2.8	2.9	59.7	58.9
1954	108,321	2,142	65,785	62,251	63,643	60,109	6,205	53,904	3,532	5.4	5.5	59.6	58.8
1955	109,683	2,064	67,087	64,234	65,023	62,170	6,450	55,722	2,852	4.3	4.4	60.0	59.3
1956	110,954	1,965	68,517	65,764	66,552	63,799	6,283	57,514	2,750	4.0	4.1	60.7	60.0
1957	112,265	1,948	68,877	66,019	66,929	64,071	5,947	58,123	2,859	4.2	4.3	60.3	59.6
1958	113,727	1,847	69,486	64,883	67,639	63,036	5,586	57,450	4,602	6.6	6.8	60.1	59.5
1959	115,329	1,788	70,157	66,418	68,369	64,630	5,565	59,065	3,740	5.3	5.5	59.9	59.3
1960[5]	117,245	1,861	71,489	67,639	69,628	65,778	5,458	60,318	3,852	5.4	5.5	60.0	59.4
1961	118,771	1,900	72,359	67,646	70,459	65,746	5,200	60,546	4,714	6.5	6.7	60.0	59.3
1962[5]	120,153	2,061	72,675	68,763	70,614	66,702	4,944	61,759	3,911	5.4	5.5	59.5	58.8
1963	122,416	2,006	73,839	69,768	71,833	67,762	4,687	63,076	4,070	5.5	5.7	59.3	58.7
1964	124,485	2,018	75,109	71,323	73,091	69,305	4,523	64,782	3,786	5.0	5.2	59.4	58.7
1965	126,513	1,946	76,401	73,034	74,455	71,088	4,361	66,726	3,366	4.4	4.5	59.5	58.9
1966	128,058	2,122	77,892	75,017	75,770	72,895	3,979	68,915	2,875	3.7	3.8	59.8	59.2
1967	129,874	2,218	79,565	76,590	77,347	74,372	3,844	70,527	2,975	3.7	3.8	60.2	59.6
1968	132,028	2,253	80,990	78,173	78,737	75,920	3,817	72,103	2,817	3.5	3.6	60.3	59.6
1969	134,335	2,238	82,972	80,140	80,734	77,902	3,606	74,296	2,832	3.4	3.5	60.8	60.1
1970	137,085	2,118	84,889	80,796	82,771	78,678	3,463	75,215	4,093	4.8	4.9	61.0	60.4
1971	140,216	1,973	86,355	81,340	84,382	79,367	3,394	75,972	5,016	5.8	5.9	60.7	60.2
1972[5]	144,126	1,813	88,847	83,966	87,034	82,153	3,484	78,669	4,882	5.5	5.6	60.9	60.4
1973[5]	147,096	1,774	91,203	86,838	89,429	85,064	3,470	81,594	4,365	4.8	4.9	61.3	60.8
1974	150,120	1,721	93,670	88,515	91,949	86,794	3,515	83,279	5,156	5.5	5.6	61.7	61.3
1975	153,153	1,678	95,453	87,524	93,775	85,846	3,408	82,438	7,929	8.3	8.5	61.6	61.2
1976	156,150	1,668	97,826	90,420	96,158	88,752	3,331	85,421	7,406	7.6	7.7	62.0	61.6
1977	159,033	1,656	100,665	93,673	99,009	92,017	3,283	88,734	6,991	6.9	7.1	62.6	62.3
1978[5]	161,910	1,631	103,882	97,679	102,251	96,048	3,387	92,661	6,202	6.0	6.1	63.5	63.2
1979	164,863	1,597	106,559	100,421	104,962	98,824	3,347	95,477	6,137	5.8	5.8	64.0	63.7
1980	167,745	1,604	108,544	100,907	106,940	99,303	3,364	95,938	7,637	7.0	7.1	64.1	63.8
1981	170,130	1,645	110,315	102,042	108,670	100,397	3,368	97,030	8,273	7.5	7.6	64.2	63.9
1982	172,271	1,668	111,872	101,194	110,204	99,526	3,401	96,125	10,678	9.5	9.7	64.3	64.0
1983	174,215	1,676	113,226	102,510	111,550	100,834	3,383	97,450	10,717	9.5	9.6	64.4	64.0
1984	176,383	1,697	115,241	106,702	113,544	105,005	3,321	101,685	8,539	7.4	7.5	64.7	64.4
1985	178,206	1,706	117,167	108,856	115,461	107,150	3,179	103,971	8,312	7.1	7.2	65.1	64.8
1982: Jan	171,335	1,656	110,721	101,346	109,065	99,690	3,394	96,296	9,375	8.5	8.6	64.0	63.7
Feb	171,489	1,664	111,141	101,431	109,477	99,767	3,369	96,398	9,710	8.7	8.9	64.2	63.8
Mar	171,667	1,671	111,255	101,347	109,584	99,676	3,376	96,300	9,908	8.9	9.0	64.2	63.8
Apr	171,844	1,668	111,475	101,220	109,807	99,552	3,352	96,200	10,255	9.2	9.3	64.2	63.9
May	172,026	1,665	112,206	101,770	110,541	100,105	3,436	96,669	10,436	9.3	9.4	64.6	64.3
June	172,190	1,664	111,757	101,200	110,093	99,536	3,330	96,206	10,557	9.4	9.6	64.3	63.9
July	172,364	1,674	112,007	101,167	110,333	99,493	3,401	96,092	10,840	9.7	9.8	64.4	64.0
Aug	172,511	1,689	112,237	101,344	110,548	99,655	3,406	96,249	10,893	9.7	9.9	64.4	64.1
Sept	172,690	1,670	112,393	101,166	110,723	99,496	3,378	96,118	11,227	10.0	10.1	64.5	64.1
Oct	172,881	1,668	112,424	100,887	110,756	99,219	3,487	95,732	11,537	10.3	10.4	64.4	64.1
Nov	173,058	1,660	112,720	100,792	111,060	99,132	3,521	95,611	11,928	10.6	10.7	64.5	64.2
Dec	173,199	1,665	112,627	100,720	110,962	99,055	3,417	95,638	11,907	10.6	10.7	64.4	64.1

See next page for continuation of table.

TABLE B-31.—*Population and the labor force, 1929–85—Continued*

[Monthly data seasonally adjusted, except as noted]

Period	Civilian noninstitutional population[1]	Resident Armed Forces[1]	Labor force including resident Armed Forces	Employment including resident Armed Forces	Civilian labor force					Unemployment rate		Labor force participation rate	
					Total	Employment			Unemployment	All workers[2]	Civilian workers	Total[3]	Civilian[4]
						Total	Agricultural	Nonagricultural					
	Thousands of persons 16 years of age and over									Percent			
1983: Jan	173,354	1,667	112,318	100,833	110,651	99,166	3,439	95,727	11,485	10.2	10.4	64.2	63.8
Feb	173,505	1,664	112,327	100,773	110,663	99,109	3,381	95,728	11,554	10.3	10.4	64.1	63.8
Mar	173,656	1,664	112,279	100,854	110,615	99,190	3,379	95,811	11,425	10.2	10.3	64.0	63.7
Apr	173,794	1,671	112,491	101,205	110,820	99,534	3,347	96,187	11,286	10.0	10.2	64.1	63.8
May	173,953	1,669	112,575	101,313	110,906	99,644	3,341	96,303	11,262	10.0	10.2	64.1	63.8
June	174,125	1,668	113,529	102,258	111,861	100,590	3,462	97,128	11,271	9.9	10.1	64.6	64.2
July	174,306	1,664	113,400	102,889	111,736	101,225	3,479	97,746	10,511	9.3	9.4	64.4	64.1
Aug	174,440	1,682	113,927	103,317	112,245	101,635	3,490	98,145	10,610	9.3	9.5	64.7	64.3
Sept	174,602	1,695	113,984	103,692	112,289	101,997	3,331	98,666	10,292	9.0	9.2	64.7	64.3
Oct	174,779	1,695	113,634	103,749	111,939	102,054	3,299	98,755	9,885	8.7	8.8	64.4	64.0
Nov	174,951	1,685	113,903	104,416	112,218	102,731	3,290	99,441	9,487	8.3	8.5	64.5	64.1
Dec	175,121	1,688	113,956	104,704	112,268	103,016	3,335	99,681	9,252	8.1	8.2	64.5	64.1
1984: Jan	175,533	1,686	113,877	104,895	112,191	103,209	3,291	99,918	8,982	7.9	8.0	64.3	63.9
Feb	175,679	1,684	114,367	105,530	112,683	103,846	3,355	100,491	8,837	7.7	7.8	64.5	64.1
Mar	175,824	1,686	114,420	105,645	112,734	103,959	3,270	100,689	8,775	7.7	7.8	64.5	64.1
Apr	175,969	1,693	114,776	106,011	113,083	104,318	3,326	100,992	8,765	7.6	7.8	64.6	64.3
May	176,123	1,690	115,412	106,865	113,722	105,175	3,349	101,826	8,547	7.4	7.5	64.9	64.6
June	176,284	1,690	115,508	107,270	113,818	105,580	3,374	102,206	8,238	7.1	7.2	64.9	64.6
July	176,440	1,698	115,620	107,164	113,922	105,466	3,332	102,134	8,456	7.3	7.4	64.9	64.6
Aug	176,583	1,712	115,430	106,934	113,718	105,222	3,270	101,952	8,496	7.4	7.5	64.7	64.4
Sept	176,763	1,720	115,515	107,135	113,795	105,415	3,356	102,059	8,380	7.3	7.4	64.7	64.4
Oct	176,956	1,705	115,741	107,362	114,036	105,657	3,193	102,464	8,379	7.2	7.3	64.8	64.4
Nov	177,135	1,699	115,864	107,670	114,165	105,971	3,395	102,576	8,194	7.1	7.2	64.8	64.5
Dec	177,306	1,698	116,202	107,946	114,504	106,248	3,387	102,861	8,256	7.1	7.2	64.9	64.6
1985: Jan	177,384	1,697	116,451	108,012	114,754	106,315	3,319	102,996	8,439	7.2	7.4	65.0	64.7
Feb	177,516	1,703	116,685	108,290	114,982	106,587	3,325	103,262	8,395	7.2	7.3	65.1	64.8
Mar	177,667	1,701	117,036	108,652	115,335	106,951	3,314	103,637	8,384	7.2	7.3	65.2	64.9
Apr	177,799	1,702	116,958	108,574	115,256	106,872	3,353	103,519	8,384	7.2	7.3	65.2	64.8
May	177,944	1,705	117,044	108,644	115,339	106,939	3,284	103,655	8,400	7.2	7.3	65.2	64.8
June	178,096	1,702	116.726	108,303	115,024	106,601	3,140	103,461	8,423	7.2	7.3	64.9	64.6
July	178,263	1,704	116,976	108,575	115,272	106,871	3,120	103,751	8,401	7.2	7.3	65.0	64.7
Aug	178,405	1,726	117,069	108,936	115,343	107,210	3,095	104,115	8,133	6.9	7.1	65.0	64.7
Sept	178,572	1,732	117,522	109,251	115,790	107,519	3,017	104,502	8,271	7.0	7.1	65.2	64.8
Oct	178,770	1,700	117,814	109,513	116,114	107,813	3,058	104,755	8,301	7.0	7.1	65.3	65.0
Nov	178,940	1,702	117,832	109,671	116,130	107,969	3,070	104,899	8,161	6.9	7.0	65.2	64.9
Dec	179,112	1,698	117,927	109,904	116,229	108,206	3,151	105,055	8,023	6.8	6.9	65.2	64.9

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[1] Not seasonally adjusted.

[2] Unemployed as percent of labor force including resident Armed Forces.

[3] Labor force including resident Armed Forces as percent of noninstitutional population including resident Armed Forces.

[4] Civilian labor force as percent of civilian noninstitutional population.

[5] Not strictly comparable with earlier data due to population adjustments as follows: Beginning 1953, introduction of 1950 census data added about 600,000 to population and about 350,000 to labor force, total employment, and agricultural employment. Beginning 1960, inclusion of Alaska and Hawaii added about 500,000 to population, about 300,000 to labor force, and about 240,000 to nonagricultural employment. Beginning 1962, introduction of 1960 census data reduced population by about 50,000 and labor force and employment by about 200,000. Beginning 1972, introduction of 1970 census data added about 800,000 to civilian noninstitutional population and about 333,000 to labor force and employment. A subsequent adjustment based on 1970 census in March 1973 added 60,000 to labor force and to employment. Beginning 1978, changes in sampling and estimation procedures introduced into the household survey added about 250,000 to labor force and to employment. Unemployment levels and rates were not significantly affected.

Note.—Labor force data in Tables B-31 through B-38 are based on household interviews and relate to the calendar week including the 12th of the month. For definitions of terms, area samples used, historical comparability of the data, comparability with other series, etc., see "Employment and Earnings."

Source: Department of Labor, Bureau of Labor Statistics.

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TABLE B-32.—*Civilian employment and unemployment by sex and age, 1947–85*

[Thousands of persons 16 years of age and over; monthly data seasonally adjusted]

Year or month	Civilian employment							Unemployment						
	Total	Males			Females			Total	Males			Females		
		Total	16–19 years	20 years and over	Total	16–19 years	20 years and over		Total	16–19 years	20 years and over	Total	16–19 years	20 years and over
1947	57,038	40,995	2,218	38,776	16,045	1,691	14,354	2,311	1,692	270	1,422	619	144	475
1948	58,343	41,725	2,344	39,382	16,617	1,682	14,936	2,276	1,559	256	1,305	717	153	564
1949	57,651	40,925	2,124	38,803	16,723	1,588	15,137	3,637	2,572	353	2,219	1,065	223	841
1950	58,918	41,578	2,186	39,394	17,340	1,517	15,824	3,288	2,239	318	1,922	1,049	195	854
1951	59,961	41,780	2,156	39,626	18,181	1,611	16,570	2,055	1,221	191	1,029	834	145	689
1952	60,250	41,682	2,107	39,578	18,568	1,612	16,958	1,883	1,185	205	980	698	140	559
1953[1]	61,179	42,430	2,136	40,296	18,749	1,584	17,164	1,834	1,202	184	1,019	632	123	510
1954	60,109	41,619	1,985	39,634	18,490	1,490	17,000	3,532	2,344	310	2,035	1,188	191	997
1955	62,170	42,621	2,095	40,526	19,551	1,547	18,002	2,852	1,854	274	1,580	998	176	823
1956	63,799	43,379	2,164	41,216	20,419	1,654	18,767	2,750	1,711	269	1,442	1,039	209	832
1957	64,071	43,357	2,115	41,239	20,714	1,663	19,052	2,859	1,841	300	1,541	1,018	197	821
1958	63,036	42,423	2,012	40,411	20,613	1,570	19,043	4,602	3,098	416	2,681	1,504	262	1,242
1959	64,630	43,466	2,198	41,267	21,164	1,640	19,524	3,740	2,420	398	2,022	1,320	256	1,063
1960[1]	65,778	43,904	2,361	41,543	21,874	1,768	20,105	3,852	2,486	426	2,060	1,366	286	1,080
1961	65,746	43,656	2,315	41,342	22,090	1,793	20,296	4,714	2,997	479	2,518	1,717	349	1,368
1962[1]	66,702	44,177	2,362	41,815	22,525	1,833	20,693	3,911	2,423	408	2,016	1,488	313	1,175
1963	67,762	44,657	2,406	42,251	23,105	1,849	21,257	4,070	2,472	501	1,971	1,598	383	1,216
1964	69,305	45,474	2,587	42,886	23,831	1,929	21,903	3,786	2,205	487	1,718	1,581	385	1,195
1965	71,088	46,340	2,918	43,422	24,748	2,118	22,630	3,366	1,914	479	1,435	1,452	395	1,056
1966	72,895	46,919	3,253	43,668	25,976	2,468	23,510	2,875	1,551	432	1,120	1,324	405	921
1967	74,372	47,479	3,186	44,294	26,893	2,496	24,397	2,975	1,508	448	1,060	1,468	391	1,078
1968	75,920	48,114	3,255	44,859	27,807	2,526	25,281	2,817	1,419	426	993	1,397	412	985
1969	77,902	48,818	3,430	45,388	29,084	2,687	26,397	2,832	1,403	440	963	1,429	413	1,015
1970	78,678	48,990	3,409	45,581	29,688	2,735	26,952	4,093	2,238	599	1,638	1,855	506	1,349
1971	79,367	49,390	3,478	45,912	29,976	2,730	27,246	5,016	2,789	693	2,097	2,227	568	1,658
1972[1]	82,153	50,896	3,765	47,130	31,257	2,980	28,276	4,882	2,659	711	1,948	2,222	598	1,625
1973[1]	85,064	52,349	4,039	48,310	32,715	3,231	29,484	4,365	2,275	653	1,624	2,089	583	1,507
1974	86,794	53,024	4,103	48,922	33,769	3,345	30,424	5,156	2,714	757	1,957	2,441	665	1,777
1975	85,846	51,857	3,839	48,018	33,989	3,263	30,726	7,929	4,442	966	3,476	3,486	802	2,684
1976	88,752	53,138	3,947	49,190	35,615	3,389	32,226	7,406	4,036	939	3,098	3,369	780	2,588
1977	92,017	54,728	4,174	50,555	37,289	3,514	33,775	6,991	3,667	874	2,794	3,324	789	2,535
1978[1]	96,048	56,479	4,336	52,143	39,569	3,734	35,836	6,202	3,142	813	2,328	3,061	769	2,292
1979	98,824	57,607	4,300	53,308	41,217	3,783	37,434	6,137	3,120	811	2,308	3,018	743	2,276
1980	99,303	57,186	4,085	53,101	42,117	3,625	38,492	7,637	4,267	913	3,353	3,370	755	2,615
1981	100,397	57,397	3,815	53,582	43,000	3,411	39,590	8,273	4,577	962	3,615	3,696	800	2,895
1982	99,526	56,271	3,379	52,891	43,256	3,170	40,086	10,678	6,179	1,090	5,089	4,499	886	3,613
1983	100,834	56,787	3,300	53,487	44,047	3,043	41,004	10,717	6,260	1,003	5,257	4,457	825	3,632
1984	105,005	59,091	3,322	55,769	45,915	3,122	42,793	8,539	4,744	812	3,932	3,794	687	3,107
1985	107,150	59,891	3,328	56,562	47,259	3,105	44,154	8,312	4,521	806	3,715	3,791	661	3,129
1984: Jan	103,209	58,251	3,245	55,006	44,958	3,145	41,813	8,982	5,090	848	4,242	3,892	703	3,189
Feb	103,846	58,577	3,334	55,243	45,269	3,120	42,149	8,837	4,958	825	4,133	3,879	733	3,146
Mar	103,959	58,663	3,344	55,319	45,296	3,041	42,255	8,775	4,907	848	4,059	3,868	728	3,140
Apr	104,318	58,701	3,316	55,385	45,617	3,132	42,485	8,765	4,887	829	4,058	3,878	729	3,149
May	105,175	59,006	3,347	55,659	46,169	3,123	43,046	8,547	4,752	809	3,943	3,795	695	3,100
June	105,580	59,393	3,386	56,007	46,187	3,201	42,986	8,238	4,575	792	3,783	3,663	687	2,976
July	105,466	59,189	3,296	55,893	46,277	3,239	43,038	8,456	4,702	825	3,877	3,754	623	3,131
Aug	105,222	59,197	3,275	55,922	46,025	3,074	42,951	8,496	4,624	760	3,864	3,872	691	3,181
Sept	105,415	59,361	3,324	56,037	46,054	3,103	42,951	8,380	4,648	818	3,830	3,732	716	3,016
Oct	105,657	59,443	3,308	56,135	46,214	3,125	43,089	8,379	4,539	800	3,739	3,840	654	3,186
Nov	105,971	59,615	3,379	56,236	46,356	3,081	43,275	8,194	4,507	780	3,727	3,687	617	3,070
Dec	106,248	59,688	3,357	56,331	46,560	3,085	43,475	8,256	4,583	808	3,775	3,673	671	3,002
1985: Jan	106,315	59,614	3,383	56,231	46,701	3,108	43,593	8,439	4,574	808	3,766	3,865	705	3,160
Feb	106,587	59,653	3,379	56,274	46,934	3,221	43,713	8,395	4,575	812	3,763	3,820	680	3,140
Mar	106,951	59,828	3,417	56,411	47,123	3,196	43,927	8,384	4,517	774	3,743	3,867	699	3,168
Apr	106,872	59,820	3,430	56,390	47,052	3,127	43,925	8,384	4,556	781	3,775	3,828	650	3,178
May	106,939	59,942	3,398	56,544	46,997	3,114	43,883	8,400	4,514	818	3,696	3,886	687	3,199
June	106,601	59,623	3,239	56,384	46,978	2,945	44,033	8,423	4,633	771	3,862	3,790	638	3,152
July	106,871	59,719	3,316	56,403	47,152	3,082	44,070	8,401	4,611	856	3,755	3,790	670	3,120
Aug	107,210	59,936	3,300	56,636	47,274	3,077	44,197	8,133	4,435	802	3,633	3,698	555	3,143
Sept	107,519	60,049	3,298	56,751	47,470	3,107	44,363	8,271	4,445	789	3,656	3,826	631	3,195
Oct	107,813	60,105	3,256	56,849	47,708	3,099	44,609	8,301	4,571	894	3,677	3,730	676	3,054
Nov	107,969	60,179	3,282	56,897	47,790	3,134	44,656	8,161	4,445	789	3,656	3,716	659	3,057
Dec	108,206	60,244	3,262	56,982	47,962	3,080	44,882	8,023	4,346	780	3,566	3,677	689	2,988

[1] See footnote 5, Table B-31.

Note.—See Note, Table B-31.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-33.—*Unemployment by duration and reason, 1947–85*

[Monthly data seasonally adjusted [1]]

Year or month	Unemployment	Duration of unemployment						Reason for unemployment			
		Less than 5 weeks	5-14 weeks	15-26 weeks	27 weeks and over	Average (mean) duration in weeks	Median duration in weeks	Job losers	Job leavers	Reentrants	New entrants
	Thousands of persons 16 years of age and over							Thousands of persons 16 years of age and over			
1947	2,311	1,210	704	234	164	...	...	...	...	...	...
1948	2,276	1,300	669	193	116	8.6	...	...	...	...	...
1949	3,637	1,756	1,194	428	256	10.0	...	...	...	...	...
1950	3,288	1,450	1,055	425	357	12.1	...	...	...	...	...
1951	2,055	1,177	574	166	137	9.7	...	...	...	...	...
1952	1,883	1,135	516	148	84	8.4	...	...	...	...	...
1953	1,834	1,142	482	132	78	8.0	...	...	...	...	...
1954	3,532	1,605	1,116	495	317	11.8	...	...	...	...	...
1955	2,852	1,335	815	366	336	13.0	...	...	...	...	...
1956	2,750	1,412	805	301	232	11.3	...	...	...	...	...
1957	2,859	1,408	891	321	239	10.5	...	...	...	...	...
1958	4,602	1,753	1,396	785	667	13.9	...	...	...	...	...
1959	3,740	1,585	1,114	469	571	14.4	...	...	...	...	...
1960	3,852	1,719	1,176	503	454	12.8	...	...	...	...	...
1961	4,714	1,806	1,376	728	804	15.6	...	...	...	...	...
1962	3,911	1,663	1,134	534	585	14.7	...	...	...	...	...
1963	4,070	1,751	1,231	535	553	14.0	...	...	...	...	...
1964	3,786	1,697	1,117	491	482	13.3	...	...	...	...	...
1965	3,366	1,628	983	404	351	11.8	...	...	...	...	...
1966	2,875	1,573	779	287	239	10.4	...	...	...	...	...
1967	2,975	1,634	893	271	177	8.7	...	1,229	438	945	396
1968	2,817	1,594	810	256	156	8.4	4.5	1,070	431	909	407
1969	2,832	1,629	827	242	133	7.8	4.4	1,017	436	965	413
1970	4,093	2,139	1,290	428	235	8.6	4.9	1,811	550	1,228	504
1971	5,016	2,245	1,585	668	519	11.3	6.3	2,323	590	1,472	630
1972	4,882	2,242	1,472	601	566	12.0	6.2	2,108	641	1,456	677
1973	4,365	2,224	1,314	483	343	10.0	5.2	1,694	683	1,340	649
1974	5,156	2,604	1,597	574	381	9.8	5.2	2,242	768	1,463	681
1975	7,929	2,940	2,484	1,303	1,203	14.2	8.4	4,386	827	1,892	823
1976	7,406	2,844	2,196	1,018	1,348	15.8	8.2	3,679	903	1,928	895
1977	6,991	2,919	2,132	913	1,028	14.3	7.0	3,166	909	1,963	953
1978	6,202	2,865	1,923	766	648	11.9	5.9	2,585	874	1,857	885
1979	6,137	2,950	1,946	706	535	10.8	5.4	2,635	880	1,806	817
1980	7,637	3,295	2,470	1,052	820	11.9	6.5	3,947	891	1,927	872
1981	8,273	3,449	2,539	1,122	1,162	13.7	6.9	4,267	923	2,102	981
1982	10,678	3,883	3,311	1,708	1,776	15.6	8.7	6,268	840	2,384	1,185
1983	10,717	3,570	2,937	1,652	2,559	20.0	10.1	6,258	830	2,412	1,216
1984	8,539	3,350	2,451	1,104	1,634	18.2	7.9	4,421	823	2,184	1,110
1985	8,312	3,498	2,509	1,025	1,280	15.6	6.8	4,139	877	2,256	1,039
1984: Jan	8,982	3,275	2,522	1,183	2,024	20.5	9.1	4,789	804	2,195	1,182
Feb	8,837	3,342	2,501	1,161	1,836	19.1	8.3	4,733	786	2,173	1,121
Mar	8,775	3,358	2,524	1,117	1,775	18.9	8.3	4,641	787	2,181	1,189
Apr	8,765	3,386	2,477	1,112	1,730	18.6	8.2	4,534	802	2,279	1,180
May	8,547	3,236	2,410	1,202	1,664	18.6	8.9	4,417	814	2,150	1,155
June	8,238	3,229	2,292	1,033	1,606	18.1	7.7	4,300	799	1,995	1,135
July	8,456	3,378	2,447	1,062	1,584	18.0	7.5	4,370	838	2,138	1,093
Aug	8,496	3,562	2,413	1,103	1,519	17.5	7.3	4,238	838	2,320	1,106
Sept	8,380	3,313	2,531	1,101	1,479	17.2	7.6	4,198	849	2,233	1,063
Oct	8,379	3,426	2,392	1,068	1,446	16.8	7.2	4,292	816	2,157	1,067
Nov	8,194	3,385	2,347	1,006	1,430	17.1	7.2	4,138	875	2,183	1,019
Dec	8,256	3,352	2,524	983	1,401	17.1	7.3	4,196	856	2,240	1,015
1985: Jan	8,439	3,627	2,540	932	1,315	15.9	6.8	4,271	877	2,240	1,045
Feb	8,395	3,501	2,488	1,065	1,348	16.0	7.1	4,236	868	2,238	1,056
Mar	8,384	3,556	2,487	1,061	1,339	15.9	7.0	4,177	861	2,301	1,074
Apr	8,384	3,528	2,516	1,031	1,343	16.1	6.8	4,229	852	2,283	1,051
May	8,400	3,607	2,594	1,063	1,211	15.0	6.7	3,994	870	2,378	1,142
June	8,423	3,466	2,536	1,033	1,295	15.5	6.8	4,167	983	2,233	1,018
July	8,401	3,525	2,514	1,078	1,251	15.5	7.1	4,206	894	2,184	1,098
Aug	8,133	3,422	2,508	1,047	1,227	15.5	7.2	4,144	875	2,191	941
Sept	8,271	3,484	2,505	1,035	1,272	15.5	6.9	4,142	852	2,335	918
Oct	8,301	3,430	2,536	1,057	1,220	15.4	7.0	4,040	911	2,237	1,045
Nov	8,161	3,465	2,448	894	1,311	15.7	6.9	4,081	808	2,226	1,055
Dec	8,023	3,374	2,460	973	1,215	15.4	6.9	3,933	876	2,225	1,033

[1] Because of independent seasonal adjustment of the various series, detail will not add to totals.

Note.—See footnote 5 and Note, Table B-31.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-34.—*Civilian labor force participation rate and civilian employment/population ratio, 1948–85*

[Percent; monthly data seasonally adjusted]

Year or month	Civilian labor force participation rate [1]							Civilian employment/population ratio [2]						
	Total	Both sexes 16–19 years	Males 20 years and over	Females 20 years and over	White	Black and other	Black	Total	Both sexes 16–19 years	Males 20 years and over	Females 20 years and over	White	Black and other	Black
1948	58.8	52.5	88.6	31.8	......	......	......	56.6	47.7	85.8	30.7	......	......	......
1949	58.9	52.2	88.5	32.3	......	......	......	55.4	45.2	83.7	30.6	......	......	......
1950	59.2	51.8	88.4	33.3	......	......	......	56.1	45.5	84.2	31.6	......	......	......
1951	59.2	52.2	88.4	34.0	......	......	......	57.3	47.9	86.1	32.6	......	......	......
1952	59.0	51.3	88.3	34.1	......	......	......	57.3	46.9	86.2	33.0	......	......	......
1953	58.9	50.2	88.0	33.9	......	......	......	57.1	46.4	85.9	32.9	......	......	......
1954	58.8	48.3	87.8	34.2	58.2	64.3	......	55.5	42.3	83.5	32.3	55.2	58.0	......
1955	59.3	48.9	87.6	35.4	58.7	64.2	......	56.7	43.5	84.3	33.8	56.5	58.7	......
1956	60.0	50.9	87.6	36.4	59.4	64.9	......	57.5	45.3	84.6	34.9	57.3	59.5	......
1957	59.6	49.6	86.9	36.5	59.1	64.4	......	57.1	43.9	83.8	35.0	56.8	59.3	......
1958	59.5	47.4	86.6	36.9	58.9	64.8	......	55.4	39.9	81.2	34.6	55.3	56.7	......
1959	59.3	46.7	86.3	37.0	58.7	64.3	......	56.0	39.9	82.3	35.1	55.9	57.5	......
1960	59.4	47.5	86.0	37.6	58.8	64.5	......	56.1	40.5	81.9	35.7	55.9	57.9	......
1961	59.3	47.0	85.7	38.0	58.8	64.1	......	55.4	39.1	80.8	35.6	55.3	56.2	......
1962	58.8	46.2	84.8	37.8	58.3	63.2	......	55.5	39.4	80.9	35.8	55.4	56.3	......
1963	58.7	45.2	84.4	38.3	58.2	63.0	......	55.4	37.4	80.6	36.3	55.3	56.2	......
1964	58.7	44.5	84.2	38.9	58.2	63.1	......	55.7	37.3	80.9	36.9	55.5	57.0	......
1965	58.9	45.7	83.9	39.4	58.4	62.9	......	56.2	38.9	81.2	37.6	56.0	57.8	......
1966	59.2	48.2	83.6	40.1	58.7	63.0	......	56.9	42.1	81.5	38.6	56.8	58.4	......
1967	59.6	48.4	83.4	41.1	59.2	62.8	......	57.3	42.2	81.5	39.3	57.2	58.2	......
1968	59.6	48.3	83.1	41.6	59.3	62.2	......	57.5	42.2	81.3	40.0	57.4	58.0	......
1969	60.1	49.5	82.8	42.7	59.9	62.1	......	58.0	43.4	81.1	41.1	58.0	58.1	......
1970	60.4	49.9	82.6	43.3	60.2	61.8	......	57.4	42.3	79.7	41.2	57.5	56.8	......
1971	60.2	49.7	82.1	43.3	60.1	60.9	......	56.6	41.3	78.5	40.9	56.8	54.9	......
1972	60.4	51.9	81.6	43.7	60.4	60.2	59.9	57.0	43.5	78.4	41.3	57.4	54.1	53.7
1973	60.8	53.7	81.3	44.4	60.8	60.5	60.2	57.8	45.9	78.6	42.2	58.2	55.0	54.5
1974	61.3	54.8	81.0	45.3	61.4	60.3	59.8	57.8	46.0	77.9	42.8	58.3	54.3	53.5
1975	61.2	54.0	80.3	46.0	61.5	59.6	58.8	56.1	43.3	74.8	42.3	56.7	51.4	50.1
1976	61.6	54.5	79.8	47.0	61.8	59.8	59.0	56.8	44.2	75.1	43.5	57.5	52.0	50.8
1977	62.3	56.0	79.7	48.1	62.5	60.4	59.8	57.9	46.1	75.6	44.8	58.6	52.5	51.4
1978	63.2	57.8	79.8	49.6	63.3	62.2	61.5	59.3	48.3	76.4	46.6	60.0	54.7	53.6
1979	63.7	57.9	79.8	50.6	63.9	62.2	61.4	59.9	48.5	76.5	47.7	60.6	55.2	53.8
1980	63.8	56.7	79.4	51.3	64.1	61.7	61.0	59.2	46.6	74.6	48.1	60.0	53.6	52.3
1981	63.9	55.4	79.0	52.1	64.3	61.3	60.8	59.0	44.6	74.0	48.6	60.0	52.6	51.3
1982	64.0	54.1	78.7	52.7	64.3	61.6	61.0	57.8	41.5	71.8	48.4	58.8	50.9	49.4
1983	64.0	53.5	78.5	53.1	64.3	62.1	61.5	57.9	41.5	71.4	48.8	58.9	51.0	49.5
1984	64.4	53.9	78.3	53.7	64.6	62.6	62.2	59.5	43.7	73.2	50.1	60.5	53.6	52.3
1985	64.8	54.5	78.1	54.7	65.0	63.3	62.9	60.1	44.4	73.3	51.0	61.0	54.7	53.4
1984: Jan	63.9	53.0	78.3	53.0	64.3	61.5	61.0	58.8	42.7	72.7	49.3	59.9	51.9	50.5
Feb	64.1	53.7	78.3	53.3	64.5	61.9	61.8	59.1	43.2	72.9	49.6	60.1	52.7	51.8
Mar	64.1	53.5	78.3	53.4	64.5	61.9	61.6	59.1	42.9	72.9	49.7	60.2	52.5	51.4
Apr	64.3	54.0	78.2	53.6	64.6	62.0	61.6	59.3	43.5	72.9	49.9	60.3	52.8	51.3
May	64.6	54.0	78.3	54.1	64.9	62.6	62.0	59.7	43.8	73.2	50.5	60.7	53.7	52.2
June	64.6	54.8	78.5	53.8	64.9	62.8	62.1	59.9	44.7	73.5	50.3	60.8	54.0	52.4
July	64.6	54.4	78.4	54.0	64.8	62.9	62.5	59.8	44.5	73.3	50.3	60.7	53.6	52.1
Aug	64.4	53.2	78.3	53.9	64.5	63.2	62.8	59.6	43.3	73.2	50.2	60.4	54.1	52.8
Sept	64.4	54.4	78.3	53.6	64.6	62.9	62.3	59.6	43.9	73.3	50.1	60.5	54.2	52.9
Oct	64.4	54.0	78.2	53.9	64.7	63.2	62.7	59.7	44.1	73.3	50.2	60.6	54.6	53.1
Nov	64.5	53.9	78.2	54.0	64.6	63.1	62.9	59.8	44.3	73.4	50.4	60.6	54.6	53.5
Dec	64.6	54.4	78.3	54.0	64.8	63.0	62.8	59.9	44.3	73.4	50.6	60.8	54.4	53.3
1985: Jan	64.7	54.8	78.2	54.4	64.9	63.5	63.0	59.9	44.4	73.3	50.7	60.8	54.9	53.5
Feb	64.8	55.4	78.1	54.4	65.0	63.1	62.9	60.0	45.2	73.2	50.8	61.0	54.1	52.9
Mar	64.9	55.5	78.2	54.6	65.1	63.7	62.8	60.2	45.4	73.4	51.0	61.1	54.8	53.3
Apr	64.8	54.9	78.1	54.6	65.0	63.7	63.1	60.1	45.1	73.2	50.9	60.9	54.9	53.5
May	64.8	55.3	78.2	54.5	65.0	63.6	63.1	60.1	44.9	73.4	50.8	61.0	54.7	53.3
June	64.6	52.4	78.1	54.6	64.8	63.3	62.7	59.9	42.7	73.1	50.9	60.6	54.9	53.6
July	64.7	54.9	77.9	54.5	64.9	63.2	62.8	60.0	44.3	73.0	50.9	60.7	54.7	53.4
Aug	64.7	53.5	78.0	54.6	64.9	62.7	62.4	60.1	44.1	73.3	51.0	60.9	54.7	53.6
Sept	64.8	54.1	78.1	54.8	65.1	63.2	62.7	60.2	44.3	73.3	51.2	61.1	54.5	53.2
Oct	65.0	54.8	78.1	54.9	65.2	63.2	62.8	60.3	43.9	73.4	51.4	61.2	54.6	53.5
Nov	64.9	54.3	78.1	54.9	65.2	63.3	62.9	60.3	44.3	73.4	51.4	61.3	54.4	53.1
Dec	64.9	54.0	78.0	55.0	65.1	63.5	63.2	60.4	43.8	73.4	51.6	61.3	54.9	53.8

[1] Civilian labor force as percent of civilian noninstitutional population in group specified.
[2] Civilian employment as percent of civilian noninstitutional population in group specified.

Note.—Data relate to persons 16 years of age and over. See footnote 5 and Note, Table B-31.

Source: Department of Labor, Bureau of Labor Statistics.

Table B–35.—*Unemployment rate, 1948–85*

[Percent; monthly data seasonally adjusted]

Year or month	Unemployment rate, all workers [1]	Unemployment rate, civilian workers [2]														
		All civilian workers	Males			Females			Both sexes 16–19 years	White	Black and other	Black	Experienced wage and salary workers	Married men, spouse present [3]	Women who maintain families
			Total	16–19 years	20 years and over	Total	16–19 years	20 years and over							
1948	....	3.8	3.6	9.8	3.2	4.1	8.3	3.6	9.2	3.5	5.9	....	4.3	....	....
1949	....	5.9	5.9	14.3	5.4	6.0	12.3	5.3	13.4	5.6	8.9	....	6.8	3.5	....
1950	5.2	5.3	5.1	12.7	4.7	5.7	11.4	5.1	12.2	4.9	9.0	....	6.0	4.6	....
1951	3.2	3.3	2.8	8.1	2.5	4.4	8.3	4.0	8.2	3.1	5.3	....	3.7	1.5	....
1952	2.9	3.0	2.8	8.9	2.4	3.6	8.0	3.2	8.5	2.8	5.4	....	3.4	1.4	....
1953	2.8	2.9	2.8	7.9	2.5	3.3	7.2	2.9	7.6	2.7	4.5	....	3.2	1.7	....
1954	5.4	5.5	5.3	13.5	4.9	6.0	11.4	5.5	12.6	5.0	9.9	....	6.2	4.0	....
1955	4.3	4.4	4.2	11.6	3.8	4.9	10.2	4.4	11.0	3.9	8.7	....	4.8	2.6	....
1956	4.0	4.1	3.8	11.1	3.4	4.8	11.2	4.2	11.1	3.6	8.3	....	4.4	2.3	....
1957	4.2	4.3	4.1	12.4	3.6	4.7	10.6	4.1	11.6	3.8	7.9	....	4.6	2.8	....
1958	6.6	6.8	6.8	17.1	6.2	6.8	14.3	6.1	15.9	6.1	12.6	....	7.3	5.1	....
1959	5.3	5.5	5.2	15.3	4.7	5.9	13.5	5.2	14.6	4.8	10.7	....	5.7	3.6	....
1960	5.4	5.5	5.4	15.3	4.7	5.9	13.9	5.1	14.7	5.0	10.2	....	5.7	3.7	....
1961	6.5	6.7	6.4	17.1	5.7	7.2	16.3	6.3	16.8	6.0	12.4	....	6.8	4.6	....
1962	5.4	5.5	5.2	14.7	4.6	6.2	14.6	5.4	14.7	4.9	10.9	....	5.6	3.6	....
1963	5.5	5.7	5.2	17.2	4.5	6.5	17.2	5.4	17.2	5.0	10.8	....	5.6	3.4	....
1964	5.0	5.2	4.6	15.8	3.9	6.2	16.6	5.2	16.2	4.6	9.6	....	5.0	2.8	....
1965	4.4	4.5	4.0	14.1	3.2	5.5	15.7	4.5	14.8	4.1	8.1	....	4.3	2.4	....
1966	3.7	3.8	3.2	11.7	2.5	4.8	14.1	3.8	12.8	3.4	7.3	....	3.5	1.9	....
1967	3.7	3.8	3.1	12.3	2.3	5.2	13.5	4.2	12.9	3.4	7.4	....	3.6	1.8	4.9
1968	3.5	3.6	2.9	11.6	2.2	4.8	14.0	3.8	12.7	3.2	6.7	....	3.4	1.6	4.4
1969	3.4	3.5	2.8	11.4	2.1	4.7	13.3	3.7	12.2	3.1	6.4	....	3.3	1.5	4.4
1970	4.8	4.9	4.4	15.0	3.5	5.9	15.6	4.8	15.3	4.5	8.2	....	4.8	2.6	5.4
1971	5.8	5.9	5.3	16.6	4.4	6.9	17.2	5.7	16.9	5.4	9.9	....	5.7	3.2	7.3
1972	5.5	5.6	5.0	15.9	4.0	6.6	16.7	5.4	16.2	5.1	10.0	10.4	5.3	2.8	7.2
1973	4.8	4.9	4.2	13.9	3.3	6.0	15.3	4.9	14.5	4.3	9.0	9.4	4.5	2.3	7.1
1974	5.5	5.6	4.9	15.6	3.8	6.7	16.6	5.5	16.0	5.0	9.9	10.5	5.3	2.7	7.0
1975	8.3	8.5	7.9	20.1	6.8	9.3	19.7	8.0	19.9	7.8	13.8	14.8	8.2	5.1	10.0
1976	7.6	7.7	7.1	19.2	5.9	8.6	18.7	7.4	19.0	7.0	13.1	14.0	7.3	4.2	10.1
1977	6.9	7.1	6.3	17.3	5.2	8.2	18.3	7.0	17.8	6.2	13.1	14.0	6.6	3.6	9.4
1978	6.0	6.1	5.3	15.8	4.3	7.2	17.1	6.0	16.4	5.2	11.9	12.8	5.6	2.8	8.5
1979	5.8	5.8	5.1	15.9	4.2	6.8	16.4	5.7	16.1	5.1	11.3	12.3	5.5	2.8	8.3
1980	7.0	7.1	6.9	18.3	5.9	7.4	17.2	6.4	17.8	6.3	13.1	14.3	6.9	4.2	9.2
1981	7.5	7.6	7.4	20.1	6.3	7.9	19.0	6.8	19.6	6.7	14.2	15.6	7.3	4.3	10.4
1982	9.5	9.7	9.9	24.4	8.8	9.4	21.9	8.3	23.2	8.6	17.3	18.9	9.3	6.5	11.7
1983	9.5	9.6	9.9	22.3	8.9	9.2	21.3	8.1	22.4	8.4	17.8	19.5	9.2	6.5	12.2
1984	7.4	7.5	7.4	19.6	6.6	7.6	18.0	6.8	18.9	6.5	14.4	15.9	7.1	4.6	10.3
1985	7.1	7.2	7.0	19.5	6.2	7.4	17.6	6.6	18.6	6.2	13.7	15.1	6.8	4.3	10.4
1984: Jan	7.9	8.0	8.0	20.7	7.2	8.0	18.3	7.1	19.5	6.9	15.6	17.2	7.6	4.9	10.9
Feb	7.7	7.8	7.8	19.8	7.0	7.9	19.0	6.9	19.4	6.8	14.9	16.2	7.4	4.9	10.7
Mar	7.7	7.8	7.7	20.2	6.8	7.9	19.3	6.9	19.8	6.7	15.1	16.6	7.3	4.8	10.9
Apr	7.6	7.8	7.7	20.0	6.8	7.8	18.9	6.9	19.5	6.7	15.0	16.6	7.3	4.7	10.4
May	7.4	7.5	7.5	19.5	6.6	7.6	18.2	6.7	18.9	6.5	14.2	15.8	7.0	4.6	9.9
June	7.1	7.2	7.2	19.0	6.3	7.3	17.7	6.5	18.3	6.2	14.0	15.6	6.7	4.5	9.9
July	7.3	7.4	7.4	20.0	6.5	7.5	16.1	6.8	18.1	6.3	14.9	16.6	7.0	4.5	9.9
Aug	7.4	7.5	7.2	18.8	6.5	7.8	18.4	6.9	18.6	6.4	14.4	15.9	7.0	4.5	10.2
Sept	7.3	7.4	7.3	19.7	6.4	7.5	18.7	6.6	19.3	6.4	13.7	15.0	6.9	4.5	9.9
Oct	7.2	7.3	7.1	19.5	6.2	7.7	17.3	6.9	18.4	6.3	13.7	15.3	6.9	4.6	10.3
Nov	7.1	7.2	7.0	18.8	6.2	7.4	16.7	6.6	17.8	6.2	13.6	14.9	6.8	4.4	10.8
Dec	7.1	7.2	7.1	19.4	6.3	7.3	17.9	6.5	18.7	6.2	13.7	15.1	6.9	4.4	9.9
1985: Jan	7.2	7.4	7.1	19.3	6.3	7.6	18.5	6.8	18.9	6.4	13.7	15.1	6.9	4.5	10.2
Feb	7.2	7.3	7.1	19.4	6.3	7.5	17.4	6.7	18.4	6.2	14.4	16.0	6.9	4.4	10.9
Mar	7.2	7.3	7.0	18.5	6.2	7.6	17.9	6.7	18.2	6.3	13.8	15.2	6.8	4.3	10.3
Apr	7.2	7.3	7.1	18.5	6.3	7.5	17.2	6.7	17.9	6.3	13.8	15.2	6.8	4.3	10.7
May	7.2	7.3	7.0	19.4	6.1	7.6	18.1	6.8	18.8	6.2	13.9	15.4	6.8	4.0	10.8
June	7.2	7.3	7.2	19.2	6.4	7.5	17.8	6.7	18.6	6.4	13.2	14.4	6.9	4.6	9.9
July	7.2	7.3	7.2	20.5	6.2	7.4	17.9	6.6	19.3	6.3	13.5	15.0	6.9	4.4	10.3
Aug	6.9	7.1	6.9	19.6	6.0	7.3	15.3	6.6	17.5	6.1	12.8	14.1	6.7	4.1	10.8
Sept	7.0	7.1	6.9	19.3	6.1	7.5	16.9	6.7	18.1	6.1	13.7	15.2	6.8	4.3	11.3
Oct	7.0	7.1	7.1	21.5	6.1	7.3	17.9	6.4	19.8	6.1	13.5	14.9	6.7	4.2	10.4
Nov	6.9	7.0	6.9	19.4	6.0	7.2	17.4	6.4	18.4	5.9	14.1	15.6	6.6	4.3	10.0
Dec	6.8	6.9	6.7	19.3	5.9	7.1	18.3	6.2	18.8	5.9	13.4	14.9	6.5	4.3	9.4

[1] Unemployed as percent of labor force including resident Armed Forces.
[2] Unemployed as percent of civilian labor force in group specified.
[3] Data for 1949 and 1951–54 are for April; 1950, for March.

Note.—Data relate to persons 16 years of age and over. See footnote 5 and Note, Table B–31.

Source: Department of Labor, Bureau of Labor Statistics.

Table B–36.—*Civilian labor force participation rate by demographic characteristic, 1954–85*

[Percent;[1] monthly data seasonally adjusted]

Year or month	All civilian workers	White							Black						
		Total	Males			Females			Total	Males			Females		
			Total	16–19 years	20 years and over	Total	16–19 years	20 years and over		Total	16–19 years	20 years and over	Total	16–19 years	20 years and over
1954	58.8	58.2	85.6	57.6	87.8	33.3	40.6	32.7	......	......	......	......	......	......	......
1955	59.3	58.7	85.4	58.6	87.5	34.5	40.7	34.0	......	......	......	......	......	......	......
1956	60.0	59.4	85.6	60.4	87.6	35.7	43.1	35.1	......	......	......	......	......	......	......
1957	59.6	59.1	84.8	59.2	86.9	35.7	42.2	35.2	......	......	......	......	......	......	......
1958	59.5	58.9	84.3	56.5	86.6	35.8	40.1	35.5	......	......	......	......	......	......	......
1959	59.3	58.7	83.8	55.9	86.3	36.0	39.6	35.6	......	......	......	......	......	......	......
1960	59.4	58.8	83.4	55.9	86.0	36.5	40.3	36.2	......	......	......	......	......	......	......
1961	59.3	58.8	83.0	54.5	85.7	36.9	40.6	36.6	......	......	......	......	......	......	......
1962	58.8	58.3	82.1	53.8	84.9	36.7	39.8	36.5	......	......	......	......	......	......	......
1963	58.7	58.2	81.5	53.1	84.4	37.2	38.7	37.0	......	......	......	......	......	......	......
1964	58.7	58.2	81.1	52.7	84.2	37.5	37.8	37.5	......	......	......	......	......	......	......
1965	58.9	58.4	80.8	54.1	83.9	38.1	39.2	38.0	......	......	......	......	......	......	......
1966	59.2	58.7	80.6	55.9	83.6	39.2	42.6	38.8	......	......	......	......	......	......	......
1967	59.6	59.2	80.7	56.3	83.5	40.1	42.5	39.8	......	......	......	......	......	......	......
1968	59.6	59.3	80.4	55.9	83.2	40.7	43.0	40.4	......	......	......	......	......	......	......
1969	60.1	59.9	80.2	56.8	83.0	41.8	44.6	41.5	......	......	......	......	......	......	......
1970	60.4	60.2	80.0	57.5	82.8	42.6	45.6	42.2	......	......	......	......	......	......	......
1971	60.2	60.1	79.6	57.9	82.3	42.6	45.4	42.3	......	......	......	......	......	......	......
1972	60.4	60.4	79.6	60.1	82.0	43.2	48.1	42.7	59.9	73.6	46.3	78.5	48.7	32.2	51.2
1973	60.8	60.8	79.4	62.0	81.6	44.1	50.1	43.5	60.2	73.4	45.7	78.4	49.3	34.2	51.6
1974	61.3	61.4	79.4	62.9	81.4	45.2	51.7	44.4	59.8	72.9	46.7	77.6	49.0	33.4	51.4
1975	61.2	61.5	78.7	61.9	80.7	45.9	51.5	45.3	58.8	70.9	42.6	76.0	48.8	34.2	51.1
1976	61.6	61.8	78.4	62.3	80.3	46.9	52.8	46.2	59.0	70.0	41.3	75.4	49.8	32.9	52.5
1977	62.3	62.5	78.5	64.0	80.2	48.0	54.5	47.3	59.8	70.6	43.2	75.6	50.8	32.9	53.6
1978	63.2	63.3	78.6	65.0	80.1	49.4	56.7	48.7	61.5	71.5	44.9	76.2	53.1	37.3	55.5
1979	63.7	63.9	78.6	64.8	80.1	50.5	57.4	49.8	61.4	71.3	43.6	76.3	53.1	36.8	55.4
1980	63.8	64.1	78.2	63.7	79.8	51.2	56.2	50.6	61.0	70.3	43.2	75.1	53.1	34.9	55.6
1981	63.9	64.3	77.9	62.4	79.5	51.9	55.4	51.5	60.8	70.0	41.6	74.5	53.5	34.0	56.0
1982	64.0	64.3	77.4	60.0	79.2	52.4	55.0	52.2	61.0	70.1	39.8	74.7	53.7	33.5	56.2
1983	64.0	64.3	77.1	59.4	78.9	52.7	54.5	52.5	61.5	70.6	39.9	75.2	54.2	33.0	56.8
1984	64.4	64.6	77.1	59.0	78.7	53.3	55.4	53.1	62.2	70.8	41.7	74.8	55.2	35.0	57.6
1985	64.8	65.0	77.0	59.7	78.5	54.1	55.2	54.0	62.9	70.8	44.6	74.4	56.5	37.9	58.6
1984: Jan	63.9	64.3	77.0	58.3	78.7	52.7	55.3	52.5	61.0	70.2	38.0	74.8	53.5	32.5	56.0
Feb	64.1	64.5	77.0	58.9	78.7	53.0	55.8	52.8	61.8	71.2	39.9	75.7	54.2	33.7	56.6
Mar	64.1	64.5	77.0	59.6	78.7	53.0	55.6	52.8	61.6	70.8	40.6	75.0	54.2	31.0	56.9
Apr	64.3	64.6	77.0	58.8	78.7	53.3	56.2	53.0	61.6	70.1	41.8	74.1	54.7	34.5	57.0
May	64.6	64.9	77.1	59.3	78.7	53.7	55.8	53.5	62.0	71.0	41.6	75.1	54.8	30.3	57.7
June	64.6	64.9	77.3	59.4	78.9	53.5	56.3	53.3	62.1	70.6	42.1	74.6	55.2	37.3	57.2
July	64.6	64.8	77.1	59.0	78.7	53.6	55.9	53.4	62.5	71.0	41.7	75.1	55.5	37.0	57.7
Aug	64.4	64.5	76.9	57.3	78.6	53.3	54.5	53.2	62.8	70.9	41.4	75.0	56.2	37.3	58.3
Sept	64.4	64.6	77.1	59.5	78.8	53.1	55.5	53.0	62.3	70.6	43.0	74.4	55.5	37.0	57.6
Oct	64.4	64.7	77.0	59.2	78.6	53.4	55.0	53.2	62.7	71.0	43.2	74.8	56.0	37.7	58.1
Nov	64.5	64.6	77.1	59.4	78.7	53.3	54.0	53.3	62.9	70.7	43.3	74.4	56.7	36.3	59.0
Dec	64.6	64.8	77.2	59.9	78.8	53.6	55.1	53.4	62.8	71.0	43.6	74.7	56.3	35.8	58.6
1985: Jan	64.7	64.9	77.0	60.3	78.5	53.8	55.4	53.7	63.0	70.8	44.5	74.4	56.8	38.0	58.9
Feb	64.8	65.0	77.1	60.3	78.6	54.0	57.0	53.8	62.9	71.1	43.2	74.9	56.4	39.1	58.3
Mar	64.9	65.1	77.1	60.2	78.6	54.2	57.0	54.0	62.8	70.5	43.8	74.2	56.6	39.5	58.6
Apr	64.8	65.0	77.1	60.8	78.6	54.0	54.8	53.9	63.1	70.7	45.0	74.2	57.0	38.7	59.0
May	64.8	65.0	77.1	61.0	78.6	53.9	55.2	53.8	63.1	71.0	44.2	74.6	56.7	40.0	58.6
June	64.6	64.8	76.8	58.0	78.5	53.8	52.6	53.9	62.7	70.4	42.4	74.2	56.5	37.2	58.7
July	64.7	64.9	76.8	60.3	78.2	54.0	54.7	53.9	62.8	70.9	46.1	74.2	56.3	38.3	58.3
Aug	64.7	64.9	76.8	59.2	78.4	54.0	53.5	54.0	62.4	70.6	44.5	74.2	55.7	34.3	58.1
Sept	64.8	65.1	76.9	59.2	78.5	54.3	55.2	54.2	62.7	71.0	44.9	74.6	56.1	35.7	58.3
Oct	65.0	65.2	77.1	60.3	78.6	54.4	55.6	54.3	62.8	70.9	46.2	74.3	56.3	38.3	58.3
Nov	64.9	65.2	76.9	58.8	78.5	54.4	56.0	54.3	62.9	70.4	43.2	74.1	56.9	38.3	59.0
Dec	64.9	65.1	76.8	58.5	78.4	54.5	55.7	54.4	63.2	70.8	45.6	74.2	57.0	37.4	59.2

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[1] Civilian labor force as percent of civilian noninstitutional population in group specified.

Note.—Data relate to persons 16 years of age and over. See footnote 5 and Note, Table B–31.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-37.—*Civilian employment/population ratio, 1954–85*

[Percent [1]; monthly data seasonally adjusted]

Year or month	All civilian workers	White							Black						
		Total	Males			Females			Total	Males			Females		
			Total	16–19 years	20 years and over	Total	16–19 years	20 years and over		Total	16–19 years	20 years and over	Total	16–19 years	20 years and over
1954	55.5	55.2	81.5	49.9	84.0	31.4	36.4	31.1							
1955	56.7	56.5	82.2	52.0	84.7	33.0	37.0	32.7							
1956	57.5	57.3	82.7	54.1	85.0	34.2	38.9	33.8							
1957	57.1	56.8	81.8	52.4	84.1	34.2	38.2	33.9							
1958	55.4	55.3	79.2	47.6	81.8	33.6	35.0	33.5							
1959	56.0	55.9	79.9	48.1	82.8	34.0	34.8	34.0							
1960	56.1	55.9	79.4	48.1	82.4	34.6	35.1	34.5							
1961	55.4	55.3	78.2	45.9	81.4	34.5	34.6	34.5							
1962	55.5	55.4	78.4	46.4	81.5	34.7	34.8	34.7							
1963	55.4	55.3	77.7	44.7	81.1	35.0	32.9	35.2							
1964	55.7	55.5	77.8	45.0	81.3	35.5	32.2	35.8							
1965	56.2	56.0	77.9	47.1	81.5	36.2	33.7	36.5							
1966	56.9	56.8	78.3	50.1	81.7	37.5	37.5	37.5							
1967	57.3	57.2	78.4	50.2	81.7	38.3	37.7	38.3							
1968	57.5	57.4	78.3	50.3	81.6	38.9	37.8	39.1							
1969	58.0	58.0	78.2	51.1	81.4	40.1	39.5	40.1							
1970	57.4	57.5	76.8	49.6	80.1	40.3	39.5	40.4							
1971	56.6	56.8	75.7	49.2	79.0	39.9	38.6	40.1							
1972	57.0	57.4	76.0	51.5	79.0	40.7	41.3	40.6	53.7	66.8	31.6	73.0	43.0	19.2	46.5
1973	57.8	58.2	76.5	54.3	79.2	41.8	43.6	41.5	54.5	67.5	32.8	73.7	43.8	22.0	47.2
1974	57.8	58.3	75.9	54.4	78.6	42.4	44.3	42.2	53.5	65.8	31.4	71.9	43.5	20.9	46.9
1975	56.1	56.7	73.0	50.6	75.7	42.0	42.5	41.9	50.1	60.6	26.3	66.5	41.6	20.2	44.9
1976	56.8	57.5	73.4	51.5	76.0	43.2	44.2	43.1	50.8	60.6	25.8	66.8	42.8	19.2	46.4
1977	57.9	58.6	74.1	54.4	76.5	44.5	45.9	44.4	51.4	61.4	26.4	67.5	43.3	18.5	47.0
1978	59.3	60.0	75.0	56.3	77.2	46.3	48.5	46.1	53.6	63.3	28.5	69.1	45.8	22.1	49.3
1979	59.9	60.6	75.1	55.7	77.3	47.5	49.4	47.3	53.8	63.4	28.7	69.1	46.0	22.4	49.3
1980	59.2	60.0	73.4	53.4	75.6	47.8	47.9	47.8	52.3	60.4	27.0	65.8	45.7	21.0	49.1
1981	59.0	60.0	72.8	51.3	75.1	48.3	46.2	48.5	51.3	59.1	24.6	64.5	45.1	19.7	48.5
1982	57.8	58.8	70.6	47.0	73.0	48.1	44.6	48.4	49.4	56.0	20.3	61.4	44.2	17.7	47.5
1983	57.9	58.9	70.4	47.4	72.6	48.5	44.5	48.9	49.5	56.3	20.4	61.6	44.1	17.0	47.4
1984	59.5	60.5	72.1	49.1	74.3	49.8	47.0	50.0	52.3	59.2	23.9	64.1	46.7	20.1	49.8
1985	60.1	61.0	72.3	49.9	74.3	50.7	47.1	51.0	53.4	60.0	26.3	64.6	48.1	23.1	50.9
1984 Jan	58.8	59.9	71.6	47.8	73.8	49.2	47.3	49.4	50.5	58.1	20.7	63.5	44.4	16.7	47.7
Feb	59.1	60.1	71.8	49.1	73.9	49.4	46.5	49.6	51.8	59.4	21.5	64.7	45.6	20.5	48.6
Mar	59.1	60.2	71.9	49.2	74.0	49.5	46.5	49.7	51.4	58.5	22.5	63.6	45.6	15.9	49.0
Apr	59.3	60.3	71.9	48.7	74.1	49.7	47.3	49.9	51.3	57.9	23.5	62.7	46.1	18.7	49.3
May	59.7	60.7	72.1	49.3	74.2	50.2	47.3	50.4	52.2	59.5	24.2	64.5	46.4	16.0	49.9
June	59.9	60.8	72.6	49.6	74.7	50.1	47.7	50.3	52.4	58.9	25.9	63.5	47.1	23.1	49.9
July	59.8	60.7	72.3	49.0	74.4	50.2	48.8	50.3	52.1	58.6	24.0	63.3	46.8	21.4	49.7
Aug	59.6	60.4	72.1	48.0	74.3	49.7	46.0	50.0	52.8	59.5	24.4	64.3	47.4	21.3	50.3
Sept	59.6	60.5	72.3	49.2	74.4	49.7	46.7	49.9	52.9	59.7	25.5	64.4	47.4	20.8	50.5
Oct	59.7	60.6	72.3	49.6	74.3	49.9	46.7	50.1	53.1	60.0	24.2	64.9	47.6	23.8	50.3
Nov	59.8	60.6	72.3	49.7	74.4	50.0	46.5	50.2	53.5	60.3	25.5	65.1	48.1	21.4	51.1
Dec	59.9	60.8	72.5	50.2	74.5	50.2	46.7	50.4	53.3	59.9	24.6	64.7	48.0	21.9	51.0
1985 Jan	59.9	60.8	72.3	50.6	74.2	50.3	46.9	50.5	53.5	59.9	25.0	64.8	48.4	23.2	51.3
Feb	60.0	61.0	72.3	50.2	74.3	50.6	49.0	50.7	52.9	59.6	25.6	64.3	47.5	22.2	50.3
Mar	60.2	61.1	72.4	50.9	74.4	50.7	48.6	50.9	53.3	59.6	25.8	64.3	48.1	22.9	51.0
Apr	60.1	60.9	72.4	51.2	74.3	50.5	46.9	50.8	53.5	59.8	27.3	64.3	48.4	23.5	51.3
May	60.1	61.0	72.5	50.8	74.5	50.4	46.9	50.7	53.3	60.1	26.8	64.6	47.9	23.4	50.7
June	59.9	60.6	71.9	48.3	74.0	50.3	44.6	50.8	53.6	60.1	25.0	65.0	48.4	23.2	51.2
July	60.0	60.7	71.9	49.9	73.9	50.5	46.5	50.8	53.4	60.1	26.2	64.8	47.9	23.4	50.6
Aug	60.1	60.9	72.1	49.0	74.2	50.6	46.6	51.0	53.6	61.0	28.9	65.3	47.7	22.0	50.5
Sept	60.2	61.1	72.4	49.7	74.4	50.8	47.3	51.1	53.2	60.1	26.5	64.7	47.7	22.8	50.5
Oct	60.3	61.2	72.4	49.2	74.5	51.0	47.1	51.3	53.5	59.7	27.3	64.1	48.4	23.7	51.2
Nov	60.3	61.3	72.4	49.5	74.5	51.1	47.6	51.4	53.1	59.1	23.7	63.9	48.3	24.5	50.9
Dec	60.4	61.3	72.4	49.0	74.4	51.2	47.1	51.5	53.8	60.0	26.9	64.5	48.7	21.6	51.7

[1] Civilian employment as percent of civilian noninstitutional population in group specified.

Note.—Data relate to persons 16 years of age and over. See footnote 5 and Note, Table B-31.

Source: Department of Labor, Bureau of Labor Statistics.

Table B–38.—*Civilian unemployment rate by demographic characteristic, 1948–85*

[Percent; [1] monthly data seasonally adjusted]

Year or month	All civilian workers	White							Black						
		Total	Males			Females			Total	Males			Females		
			Total	16–19 years	20 years and over	Total	16–19 years	20 years and over		Total	16–19 years	20 years and over	Total	16–19 years	20 years and over
1948	3.8	3.5	3.4	....	....	3.8	....	....	....	....	....	....	....	....	....
1949	5.9	5.6	5.6	....	....	5.7	....	....	....	....	....	....	....	....	....
1950	5.3	4.9	4.7	....	....	5.3	....	....	....	....	....	....	....	....	....
1951	3.3	3.1	2.6	....	....	4.2	....	....	....	....	....	....	....	....	....
1952	3.0	2.8	2.5	....	....	3.3	....	....	....	....	....	....	....	....	....
1953	2.9	2.7	2.5	....	....	3.1	....	....	....	....	....	....	....	....	....
1954	5.5	5.0	4.8	13.4	4.4	5.5	10.4	5.1	....	....	....	....	....	....	....
1955	4.4	3.9	3.7	11.3	3.3	4.3	9.1	3.9	....	....	....	....	....	....	....
1956	4.1	3.6	3.4	10.5	3.0	4.2	9.7	3.7	....	....	....	....	....	....	....
1957	4.3	3.8	3.6	11.5	3.2	4.3	9.5	3.8	....	....	....	....	....	....	....
1958	6.8	6.1	6.1	15.7	5.5	6.2	12.7	5.6	....	....	....	....	....	....	....
1959	5.5	4.8	4.6	14.0	4.1	5.3	12.0	4.7	....	....	....	....	....	....	....
1960	5.5	5.0	4.8	14.0	4.2	5.3	12.7	4.6	....	....	....	....	....	....	....
1961	6.7	6.0	5.7	15.7	5.1	6.5	14.8	5.7	....	....	....	....	....	....	....
1962	5.5	4.9	4.6	13.7	4.0	5.5	12.8	4.7	....	....	....	....	....	....	....
1963	5.7	5.0	4.7	15.9	3.9	5.8	15.1	4.8	....	....	....	....	....	....	....
1964	5.2	4.6	4.1	14.7	3.4	5.5	14.9	4.6	....	....	....	....	....	....	....
1965	4.5	4.1	3.6	12.9	2.9	5.0	14.0	4.0	....	....	....	....	....	....	....
1966	3.8	3.4	2.8	10.5	2.2	4.3	12.1	3.3	....	....	....	....	....	....	....
1967	3.8	3.4	2.7	10.7	2.1	4.6	11.5	3.8	....	....	....	....	....	....	....
1968	3.6	3.2	2.6	10.1	2.0	4.3	12.1	3.4	....	....	....	....	....	....	....
1969	3.5	3.1	2.5	10.0	1.9	4.2	11.5	3.4	....	....	....	....	....	....	....
1970	4.9	4.5	4.0	13.7	3.2	5.4	13.4	4.4	....	....	....	....	....	....	....
1971	5.9	5.4	4.9	15.1	4.0	6.3	15.1	5.3	....	....	....	....	....	....	....
1972	5.6	5.1	4.5	14.2	3.6	5.9	14.2	4.9	10.4	9.3	31.7	7.0	11.8	40.5	9.0
1973	4.9	4.3	3.8	12.3	3.0	5.3	13.0	4.3	9.4	8.0	27.8	6.0	11.1	36.1	8.6
1974	5.6	5.0	4.4	13.5	3.5	6.1	14.5	5.1	10.5	9.8	33.1	7.4	11.3	37.4	8.8
1975	8.5	7.8	7.2	18.3	6.2	8.6	17.4	7.5	14.8	14.8	38.1	12.5	14.8	41.0	12.2
1976	7.7	7.0	6.4	17.3	5.4	7.9	16.4	6.8	14.0	13.7	37.5	11.4	14.3	41.6	11.7
1977	7.1	6.2	5.5	15.0	4.7	7.3	15.9	6.2	14.0	13.3	39.2	10.7	14.9	43.4	12.3
1978	6.1	5.2	4.6	13.5	3.7	6.2	14.4	5.2	12.8	11.8	36.7	9.3	13.8	40.8	11.2
1979	5.8	5.1	4.5	13.9	3.6	5.9	14.0	5.0	12.3	11.4	34.2	9.3	13.3	39.1	10.9
1980	7.1	6.3	6.1	16.2	5.3	6.5	14.8	5.6	14.3	14.5	37.5	12.4	14.0	39.8	11.9
1981	7.6	6.7	6.5	17.9	5.6	6.9	16.6	5.9	15.6	15.7	40.7	13.5	15.6	42.2	13.4
1982	9.7	8.6	8.8	21.7	7.8	8.3	19.0	7.3	18.9	20.1	48.9	17.8	17.6	47.1	15.4
1983	9.6	8.4	8.8	20.2	7.9	7.9	18.3	6.9	19.5	20.3	48.8	18.1	18.6	48.2	16.5
1984	7.5	6.5	6.4	16.8	5.7	6.5	15.2	5.8	15.9	16.4	42.7	14.3	15.4	42.6	13.5
1985	7.2	6.2	6.1	16.5	5.4	6.4	14.8	5.7	15.1	15.3	41.0	13.2	14.9	39.2	13.1
1984: Jan	8.0	6.9	7.0	18.0	6.3	6.7	14.5	6.0	17.2	17.2	45.5	15.2	17.1	48.8	14.9
Feb	7.8	6.8	6.8	16.7	6.1	6.8	16.7	5.9	16.2	16.6	46.0	14.4	15.8	39.3	14.2
Mar	7.8	6.7	6.7	17.5	5.9	6.7	16.3	5.9	16.6	17.3	44.4	15.2	15.9	48.6	13.8
Apr	7.8	6.7	6.6	17.1	5.9	6.7	15.8	5.9	16.6	17.4	43.8	15.4	15.7	45.8	13.6
May	7.5	6.5	6.4	16.8	5.7	6.5	15.3	5.8	15.8	16.1	42.0	14.1	15.5	47.3	13.5
June	7.2	6.2	6.1	16.6	5.4	6.4	15.2	5.6	15.6	16.6	38.5	14.9	14.6	38.1	12.8
July	7.4	6.3	6.2	17.0	5.5	6.4	12.8	5.8	16.6	17.5	42.4	15.6	15.7	42.2	13.7
Aug	7.5	6.4	6.2	16.2	5.5	6.6	15.6	5.8	15.9	16.1	41.1	14.2	15.7	42.8	13.7
Sept	7.4	6.4	6.3	17.2	5.5	6.5	15.7	5.7	15.0	15.5	40.8	13.5	14.5	43.8	12.4
Oct	7.3	6.3	6.1	16.3	5.4	6.6	15.0	5.9	15.3	15.5	43.9	13.3	15.0	36.8	13.4
Nov	7.2	6.2	6.1	16.4	5.4	6.3	13.8	5.7	14.9	14.7	41.2	12.6	15.2	41.1	13.4
Dec	7.2	6.2	6.2	16.3	5.5	6.3	15.2	5.6	15.1	15.6	43.5	13.4	14.6	38.9	13.0
1985: Jan	7.4	6.4	6.2	16.1	5.5	6.6	15.3	5.9	15.1	15.3	43.9	12.9	14.8	38.9	13.0
Feb	7.3	6.2	6.1	16.8	5.4	6.3	14.0	5.7	16.0	16.2	40.9	14.2	15.8	43.3	13.7
Mar	7.3	6.3	6.0	15.6	5.4	6.5	14.7	5.9	15.2	15.4	41.1	13.3	15.0	41.9	13.0
Apr	7.3	6.3	6.1	15.7	5.4	6.5	14.5	5.8	15.2	15.3	39.4	13.3	15.0	39.3	13.2
May	7.3	6.2	6.0	16.7	5.2	6.5	15.1	5.8	15.4	15.3	39.3	13.4	15.5	41.5	13.5
June	7.3	6.4	6.4	16.7	5.7	6.5	15.2	5.8	14.4	14.5	41.0	12.5	14.4	37.8	12.7
July	7.3	6.3	6.3	17.1	5.6	6.4	15.0	5.7	15.0	15.1	43.1	12.8	14.9	39.0	13.1
Aug	7.1	6.1	6.1	17.2	5.3	6.2	13.0	5.7	14.1	13.7	34.9	11.9	14.5	35.9	13.1
Sept	7.1	6.1	5.9	16.2	5.2	6.4	14.4	5.7	15.2	15.4	41.1	13.3	14.9	36.1	13.5
Oct	7.1	6.1	6.1	18.5	5.2	6.2	15.3	5.5	14.9	15.8	41.0	13.7	13.9	38.2	12.1
Nov	7.0	5.9	5.8	15.8	5.2	6.1	15.1	5.4	15.6	16.0	45.2	13.7	15.2	36.0	13.6
Dec	6.9	5.9	5.7	16.2	5.1	6.1	15.5	5.4	14.9	15.3	41.0	13.1	14.5	42.3	12.6

[1] Unemployed as percent of civilian labor force in group specified.

Note.—See footnote 5 and Note, Table B-31.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-39.—*Unemployment insurance programs, selected data, 1955–85*

Year or month	All programs			State programs					
								Benefits paid	
	Covered employment[1]	Insured unemployment (weekly average)[2][3]	Total benefits paid (millions of dollars)[2][4]	Insured unemployment	Initial claims	Exhaustions[5]	Insured unemployment as percent of covered employment	Total (millions of dollars)[4]	Average weekly check (dollars)[6]
	Thousands			Weekly average; thousands					
1955	40,018	1,399	1,560.2	1,265	226	25	3.5	1,350.3	25.04
1956	42,751	1,323	1,540.6	1,215	227	20	3.2	1,380.7	27.02
1957	43,436	1,571	1,913.0	1,446	270	23	3.6	1,733.9	28.17
1958	44,411	2,773	4,290.6	2,510	369	50	6.4	3,512.7	30.58
1959	45,728	1,860	2,854.3	1,684	277	33	4.4	2,279.0	30.41
1960	46,334	2,071	3,022.8	1,908	331	31	4.8	2,726.7	32.87
1961	46,266	2,994	4,358.1	2,290	350	46	5.6	3,422.7	33.80
1962	47,776	1,946	3,145.1	1,783	302	32	4.4	2,675.4	34.56
1963	48,434	[7] 1,973	3,025.9	[7] 1,806	[7] 298	30	4.3	2,774.7	35.27
1964	49,637	1,753	2,749.2	1,605	268	26	3.8	2,522.1	35.92
1965	51,580	1,450	2,360.4	1,328	232	21	3.0	2,166.0	37.19
1966	54,739	1,129	1,890.9	1,061	203	15	2.3	1,771.3	39.75
1967	56,342	1,270	2,221.5	1,205	226	17	2.5	2,092.3	41.25
1968	57,977	1,187	2,191.0	1,111	201	16	2.2	2,031.6	43.43
1969	59,999	1,177	2,298.6	1,101	200	16	2.1	2,127.9	46.17
1970	59,526	2,070	4,209.3	1,805	296	25	3.4	3,848.5	50.34
1971	59,375	2,608	6,154.0	2,150	295	39	4.1	4,957.0	54.02
1972	66,458	2,192	5,491.1	1,848	261	35	3.5	4,471.0	56.76
1973	69,897	1,793	4,517.3	1,632	247	29	2.7	4,007.6	59.00
1974	72,451	2,558	6,933.9	2,262	363	37	3.5	5,974.9	64.25
1975	71,037	4,937	16,802.4	3,986	478	81	6.0	11,754.7	70.23
1976	73,459	3,846	12,344.8	2,991	386	63	4.6	8,974.5	75.16
1977	76,419	3,308	10,998.9	2,655	375	55	3.9	8,357.2	78.79
1978	88,804	2,645	9,006.9	2,359	346	39	3.3	7,717.2	83.67
1979	92,062	2,592	9,401.3	2,434	388	39	2.9	8,612.9	89.67
1980	92,659	3,837	16,175.4	3,350	488	59	3.9	13,761.1	98.95
1981	93,300	3,410	15,287.1	3,047	460	57	3.5	13,262.1	106.70
1982	91,628	4,594	23,774.8	4,061	583	80	4.6	20,650.0	119.37
1983	91,898	3,775	20,206.2	3,396	438	80	3.9	17,762.8	123.59
1984	[8] 96,474	2,565	13,109.6	2,474	378	50	2.8	12,594.7	123.47
				**	**		**		
1984: Jan	...	3,374	1,515.5	2,610	373	61	3.0	1,457.9	123.60
Feb	...	3,174	1,455.4	2,525	354	58	2.9	1,400.4	124.29
Mar	...	2,958	1,425.2	2,489	352	57	2.9	1,368.0	124.64
Apr	...	2,613	1,207.3	2,430	362	58	2.8	1,160.9	125.20
May	...	2,290	1,131.7	2,382	353	54	2.8	1,100.8	123.85
June	...	2,166	966.9	2,365	362	48	2.7	935.2	122.19
July	...	2,327	1,003.7	2,397	378	49	2.8	972.8	120.13
Aug	...	2,184	1,040.9	2,356	366	45	2.7	1,013.7	120.54
Sept	...	2,083	851.0	2,390	372	43	2.8	826.9	122.04
Oct	...	2,149	998.4	2,425	393	42	2.8	967.9	123.56
Nov	...	2,441	1,047.1	2,509	395	42	2.9	1,009.9	124.39
Dec	...	2,778	1,163.1	2,487	386	44	2.8	1,114.8	125.36
1985: Jan	...	3,361	1,556.1	2,607	394	50	2.9	1,505.3	126.68
Feb	...	3,339	1,495.6	2,681	406	52	3.0	1,450.2	127.28
Mar	...	3,113	1,483.7	2,639	392	55	3.0	1,439.2	128.98
Apr	...	2,766	1,379.5	2,587	390	58	2.9	1,333.7	127.55
May	...	2,455	1,258.4	2,575	386	52	2.8	1,221.9	126.34
June	...	2,337	1,035.9	2,548	396	49	2.8	1,008.5	125.73
July	...	2,523	1,197.3	2,597	390	51	2.8	1,167.3	125.04
Aug	...	2,361	1,123.2	2,533	382	46	2.8	1,091.4	126.13
Sept	...	2,212	1,000.9	2,529	381	43	2.8	970.5	127.19
Oct	...	2,227	1,105.5	2,519	375	63	2.7	1,073.4	128.20
Nov	...	2,468	1,052.6	2,548	384	43	2.8	1,017.6	126.64
Dec	...	...	...	2,574	390	...	2.8	...	...

**Monthly data are seasonally adjusted.

[1] Includes persons under the State, UCFE (Federal employee, effective January 1955), and RRB (Railroad Retirement Board) programs. Beginning October 1958, also includes the UCX program (unemployment compensation for ex-servicemen).

[2] Includes State, UCFE, RR, UCX, UCV (unemployment compensation for veterans, October 1952–January 1960), and SRA (Servicemen's Readjustment Act, September 1944–September 1951) programs. Also includes Federal and State extended benefit programs. Does not include FSB (Federal supplemental benefits), SUA (special unemployment assistance), and Federal Supplemental Compensation programs.

[3] Covered workers who have completed at least 1 week of unemployment.

[4] Annual data are net amounts and monthly data are gross amounts.

[5] Individuals receiving final payments in benefit year.

[6] For total unemployment only.

[7] Programs include Puerto Rican sugarcane workers for initial claims and insured unemployment beginning July 1963.

[8] Latest data available for all programs combined. Workers covered by State programs account for about 97 percent of wage and salary earners.

Source: Department of Labor, Employment and Training Administration.

Table B-40.—*Employees on nonagricultural payrolls, by major industry, 1939–85*

[Thousands of persons; monthly data seasonally adjusted]

Year or month	Total	Goods-producing industries					
		Total	Mining	Con-struction	Manufacturing		
					Total	Durable goods	Nondur-able goods
1939	30,603	12,297	854	1,165	10,278	4,715	5,564
1940	32,361	13,221	925	1,311	10,985	5,363	5,622
1941	36,539	15,963	957	1,814	13,192	6,968	6,225
1942	40,106	18,470	992	2,198	15,280	8,823	6,458
1943	42,434	20,114	925	1,587	17,602	11,084	6,518
1944	41,864	19,328	892	1,108	17,328	10,856	6,472
1945	40,374	17,507	836	1,147	15,524	9,074	6,450
1946	41,652	17,248	862	1,683	14,703	7,742	6,962
1947	43,857	18,509	955	2,009	15,545	8,385	7,159
1948	44,866	18,774	994	2,198	15,582	8,326	7,256
1949	43,754	17,565	930	2,194	14,441	7,489	6,953
1950	45,197	18,506	901	2,364	15,241	8,094	7,147
1951	47,819	19,959	929	2,637	16,393	9,089	7,304
1952	48,793	20,198	898	2,668	16,632	9,349	7,284
1953	50,202	21,074	866	2,659	17,549	10,110	7,438
1954	48,990	19,751	791	2,646	16,314	9,129	7,185
1955	50,641	20,513	792	2,839	16,882	9,541	7,341
1956	52,369	21,104	822	3,039	17,243	9,833	7,411
1957	52,853	20,964	828	2,962	17,174	9,855	7,321
1958	51,324	19,513	751	2,817	15,945	8,829	7,116
1959	53,268	20,411	732	3,004	16,675	9,373	7,303
1960	54,189	20,434	712	2,926	16,796	9,459	7,337
1961	53,999	19,857	672	2,859	16,326	9,070	7,256
1962	55,549	20,451	650	2,948	16,853	9,480	7,373
1963	56,653	20,640	635	3,010	16,995	9,616	7,380
1964	58,283	21,005	634	3,097	17,274	9,816	7,458
1965	60,765	21,926	632	3,232	18,062	10,405	7,656
1966	63,901	23,158	627	3,317	19,214	11,282	7,930
1967	65,803	23,308	613	3,248	19,447	11,439	8,007
1968	67,897	23,737	606	3,350	19,781	11,626	8,155
1969	70,384	24,361	619	3,575	20,167	11,895	8,272
1970	70,880	23,578	623	3,588	19,367	11,208	8,158
1971	71,214	22,935	609	3,704	18,623	10,636	7,987
1972	73,675	23,668	628	3,889	19,151	11,049	8,102
1973	76,790	24,893	642	4,097	20,154	11,891	8,262
1974	78,265	24,794	697	4,020	20,077	11,925	8,152
1975	76,945	22,600	752	3,525	18,323	10,688	7,635
1976	79,382	23,352	779	3,576	18,997	11,077	7,920
1977	82,471	24,346	813	3,851	19,682	11,597	8,086
1978	86,697	25,585	851	4,229	20,505	12,274	8,231
1979	89,823	26,461	958	4,463	21,040	12,760	8,280
1980	90,406	25,658	1,027	4,346	20,285	12,187	8,098
1981	91,156	25,497	1,139	4,188	20,170	12,109	8,061
1982	89,566	23,813	1,128	3,905	18,781	11,039	7,741
1983	90,196	23,334	952	3,948	18,434	10,732	7,702
1984	94,461	24,730	974	4,345	19,412	11,522	7,890
1985 ᵖ	97,692	25,054	969	4,661	19,424	11,565	7,859
1984: Jan	92,603	24,234	963	4,192	19,079	11,232	7,847
Feb	93,115	24,464	965	4,308	19,191	11,322	7,869
Mar	93,387	24,507	966	4,265	19,276	11,390	7,886
Apr	93,725	24,603	967	4,289	19,347	11,438	7,909
May	93,998	24,670	973	4,307	19,390	11,485	7,905
June	94,317	24,767	978	4,344	19,445	11,538	7,907
July	94,615	24,842	979	4,354	19,509	11,589	7,920
Aug	94,893	24,889	984	4,366	19,539	11,638	7,901
Sept	95,238	24,851	985	4,386	19,480	11,611	7,869
Oct	95,573	24,918	979	4,403	19,536	11,652	7,884
Nov	95,882	24,955	978	4,424	19,553	11,666	7,887
Dec	96,092	25,045	973	4,469	19,603	11,701	7,902
1985: Jan	96,419	25,112	974	4,534	19,604	11,702	7,902
Feb	96,591	25,062	976	4,525	19,561	11,675	7,886
Mar	96,910	25,056	977	4,553	19,526	11,651	7,875
Apr	97,120	25,090	982	4,641	19,467	11,608	7,859
May	97,421	25,066	982	4,658	19,426	11,586	7,840
June	97,473	25,010	974	4,638	19,398	11,560	7,838
July	97,707	24,980	969	4,660	19,351	11,509	7,842
Aug	97,977	25,015	965	4,688	19,362	11,519	7,843
Sept	98,217	24,962	962	4,721	19,279	11,449	7,830
Oct	98,559	25,051	960	4,753	19,338	11,493	7,845
Nov ᵖ	98,739	25,076	953	4,748	19,375	11,507	7,868
Dec ᵖ	99,059	25,136	952	4,764	19,420	11,525	7,895

See next page for continuation of table.

Table B-40.—*Employees on nonagricultural payrolls, by major industry, 1939–85*—Continued

[Thousands of persons; monthly data seasonally adjusted]

Year or month	Service-producing industries								
	Total	Transportation and public utilities	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services	Government		
							Total	Federal	State and local
1939	18,306	2,936	1,762	4,664	1,447	3,502	3,995	905	3,090
1940	19,140	3,038	1,835	4,914	1,485	3,665	4,202	996	3,206
1941	20,574	3,274	1,960	5,251	1,525	3,905	4,660	1,340	3,320
1942	21,636	3,460	1,906	5,212	1,509	4,066	5,483	2,213	3,270
1943	22,320	3,647	1,822	5,160	1,481	4,130	6,080	2,905	3,175
1944	22,536	3,829	1,845	5,214	1,461	4,145	6,043	2,928	3,116
1945	22,867	3,906	1,949	5,365	1,481	4,222	5,944	2,808	3,137
1946	24,404	4,061	2,291	6,084	1,675	4,697	5,595	2,254	3,341
1947	25,348	4,166	2,471	6,485	1,728	5,025	5,474	1,892	3,582
1948	26,092	4,189	2,605	6,667	1,800	5,181	5,650	1,863	3,787
1949	26,189	4,001	2,602	6,662	1,828	5,240	5,856	1,908	3,948
1950	26,691	4,034	2,635	6,751	1,888	5,357	6,026	1,928	4,098
1951	27,860	4,226	2,727	7,015	1,956	5,547	6,389	2,302	4,087
1952	28,595	4,248	2,812	7,192	2,035	5,699	6,609	2,420	4,188
1953	29,128	4,290	2,854	7,393	2,111	5,835	6,645	2,305	4,340
1954	29,239	4,084	2,867	7,368	2,200	5,969	6,751	2,188	4,563
1955	30,128	4,141	2,926	7,610	2,298	6,240	6,914	2,187	4,727
1956	31,266	4,244	3,018	7,840	2,389	6,497	7,278	2,209	5,069
1957	31,889	4,241	3,028	7,858	2,438	6,708	7,616	2,217	5,399
1958	31,811	3,976	2,980	7,770	2,481	6,765	7,839	2,191	5,648
1959	32,857	4,011	3,082	8,045	2,549	7,087	8,083	2,233	5,850
1960	33,755	4,004	3,143	8,248	2,629	7,378	8,353	2,270	6,083
1961	34,142	3,903	3,133	8,204	2,688	7,620	8,594	2,279	6,315
1962	35,098	3,906	3,198	8,368	2,754	7,982	8,890	2,340	6,550
1963	36,013	3,903	3,248	8,530	2,830	8,277	9,225	2,358	6,868
1964	37,278	3,951	3,337	8,823	2,911	8,660	9,596	2,348	7,248
1965	38,839	4,036	3,466	9,250	2,977	9,036	10,074	2,378	7,696
1966	40,743	4,158	3,597	9,648	3,058	9,498	10,784	2,564	8,220
1967	42,495	4,268	3,689	9,917	3,185	10,045	11,391	2,719	8,672
1968	44,160	4,318	3,779	10,320	3,337	10,567	11,839	2,737	9,102
1969	46,023	4,442	3,907	10,798	3,512	11,169	12,195	2,758	9,437
1970	47,302	4,515	3,993	11,047	3,645	11,548	12,554	2,731	9,823
1971	48,278	4,476	4,001	11,351	3,772	11,797	12,881	2,696	10,185
1972	50,007	4,541	4,113	11,836	3,908	12,276	13,334	2,684	10,649
1973	51,897	4,656	4,277	12,329	4,046	12,857	13,732	2,663	11,068
1974	53,471	4,725	4,433	12,554	4,148	13,441	14,170	2,724	11,446
1975	54,345	4,542	4,415	12,645	4,165	13,892	14,686	2,748	11,937
1976	56,030	4,582	4,546	13,209	4,271	14,551	14,871	2,733	12,138
1977	58,125	4,713	4,708	13,808	4,467	15,303	15,127	2,727	12,399
1978	61,113	4,923	4,969	14,573	4,724	16,252	15,672	2,753	12,919
1979	63,363	5,136	5,204	14,989	4,975	17,112	15,947	2,773	13,174
1980	64,748	5,146	5,275	15,035	5,160	17,890	16,241	2,866	13,375
1981	65,659	5,165	5,358	15,189	5,298	18,619	16,031	2,772	13,259
1982	65,753	5,082	5,278	15,179	5,341	19,036	15,837	2,739	13,098
1983	66,862	4,954	5,268	15,613	5,468	19,694	15,869	2,774	13,096
1984	69,731	5,171	5,550	16,584	5,682	20,761	15,984	2,807	13,177
1985 p	72,638	5,301	5,770	17,418	5,924	21,931	16,294	2,873	13,421
1984: Jan	68,369	5,094	5,422	16,138	5,588	20,259	15,868	2,778	13,090
Feb	68,651	5,103	5,459	16,237	5,607	20,358	15,887	2,782	13,105
Mar	68,880	5,126	5,478	16,296	5,627	20,463	15,890	2,791	13,099
Apr	69,122	5,135	5,499	16,385	5,639	20,546	15,918	2,795	13,123
May	69,328	5,145	5,516	16,443	5,653	20,628	15,943	2,806	13,137
June	69,550	5,164	5,532	16,534	5,680	20,707	15,933	2,802	13,131
July	69,773	5,174	5,557	16,623	5,693	20,766	15,960	2,805	13,155
Aug	70,004	5,194	5,573	16,673	5,707	20,849	16,008	2,812	13,196
Sept	70,387	5,210	5,610	16,750	5,719	21,014	16,084	2,827	13,257
Oct	70,655	5,223	5,636	16,859	5,737	21,087	16,113	2,823	13,290
Nov	70,927	5,229	5,647	16,994	5,755	21,184	16,118	2,831	13,287
Dec	71,047	5,246	5,665	17,026	5,776	21,252	16,082	2,836	13,246
1985: Jan	71,307	5,259	5,686	17,090	5,790	21,382	16,100	2,836	13,264
Feb	71,529	5,272	5,697	17,160	5,809	21,480	16,111	2,834	13,277
Mar	71,854	5,269	5,714	17,249	5,835	21,644	16,143	2,850	13,293
Apr	72,030	5,278	5,733	17,280	5,858	21,723	16,158	2,859	13,299
May	72,355	5,301	5,748	17,392	5,888	21,813	16,213	2,873	13,340
June	72,463	5,295	5,768	17,425	5,906	21,856	16,213	2,872	13,341
July	72,727	5,302	5,773	17,453	5,932	21,926	16,341	2,878	13,463
Aug	72,962	5,282	5,791	17,514	5,959	22,073	16,343	2,886	13,457
Sept	73,255	5,317	5,805	17,539	5,987	22,155	16,452	2,904	13,548
Oct	73,508	5,327	5,830	17,610	6,011	22,244	16,486	2,892	13,594
Nov p	73,663	5,341	5,834	17,621	6,046	22,358	16,463	2,892	13,571
Dec p	73,923	5,358	5,855	17,648	6,066	22,473	16,523	2,899	13,624

Note.—Data in Tables B-40 through B-42 are based on reports from employing establishments and relate to full- and part-time wage and salary workers in nonagricultural establishments who worked during or received pay for any part of the pay period which includes the 12th of the month. Not comparable with labor force data (Tables B-31 through B-38), which include proprietors, self-employed persons, domestic servants, and unpaid family workers; which count persons as employed when they are not at work because of industrial disputes, bad weather, etc., even if they are not paid for the time off; and which are based on a sample of the working-age population. For description and details of the various establishment data, see "Employment and Earnings."

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-41.—*Average weekly hours and hourly earnings in selected private nonagricultural industries, 1947–85*

[For production or nonsupervisory workers; monthly data seasonally adjusted, except as noted]

Year or month	Average weekly hours				Average gross hourly earnings, current dollars				Adjusted hourly earnings, total private nonagricultural [2]			
	Total private nonagricultural [1]	Manufacturing	Construction	Retail trade	Total private nonagricultural [1]	Manufacturing	Construction	Retail trade	Index, 1977=100		Percent change from a year earlier [4]	
									Current dollars	1977 dollars [3]	Current dollars	1977 dollars
1947	40.3	40.4	38.2	40.3	$1.131	$1.216	$1.540	$0.838	21.6	58.5	....	....
1948	40.0	40.0	38.1	40.2	1.225	1.327	1.712	.901	23.4	58.9	8.3	0.7
1949	39.4	39.1	37.7	40.4	1.275	1.376	1.792	.951	24.5	62.3	4.7	5.8
1950	39.8	40.5	37.4	40.4	1.335	1.439	1.863	.983	25.4	64.0	3.7	2.7
1951	39.9	40.6	38.1	40.4	1.45	1.56	2.02	1.06	27.3	63.6	7.5	−.6
1952	39.9	40.7	38.9	39.8	1.52	1.64	2.13	1.09	28.7	65.5	5.1	3.0
1953	39.6	40.5	37.9	39.1	1.61	1.74	2.28	1.16	30.3	68.7	5.6	4.9
1954	39.1	39.6	37.2	39.2	1.65	1.78	2.38	1.20	31.3	70.5	3.3	2.6
1955	39.6	40.7	37.1	39.0	1.71	1.85	2.45	1.25	32.4	73.3	3.5	4.0
1956	39.3	40.4	37.5	38.6	1.80	1.95	2.57	1.30	34.0	75.9	4.9	3.5
1957	38.8	39.8	37.0	38.1	1.89	2.04	2.71	1.37	35.7	76.9	5.0	1.3
1958	38.5	39.2	36.8	38.1	1.95	2.10	2.82	1.42	37.2	78.0	4.2	1.4
1959	39.0	40.3	37.0	38.2	2.02	2.19	2.93	1.47	38.5	80.0	3.5	2.6
1960	38.6	39.7	36.7	38.0	2.09	2.26	3.07	1.52	39.8	81.4	3.4	1.8
1961	38.6	39.8	36.9	37.6	2.14	2.32	3.20	1.56	41.0	83.0	3.0	2.0
1962	38.7	40.4	37.0	37.4	2.22	2.39	[illegible]	1.63	42.4	85.0	3.4	2.4
1963	38.8	40.5	37.3	37.3	2.28	2.45	[illegible]	1.68	43.6	86.3	2.8	1.5
1964	38.7	40.7	37.2	37.0	2.36	2.53	3.55	1.75	44.8	87.5	2.8	1.4
1965	38.8	41.2	37.4	36.6	2.46	2.61	3.70	1.82	46.4	89.0	3.6	1.7
1966	38.6	41.4	37.6	35.9	2.56	2.71	3.89	1.91	48.4	90.3	4.3	1.5
1967	38.0	40.6	37.7	35.3	2.68	2.82	4.11	2.01	50.8	92.2	5.0	2.1
1968	37.8	40.7	37.3	34.7	2.85	3.01	4.41	2.16	53.9	94.0	6.1	2.0
1969	37.7	40.6	37.9	34.2	3.04	3.19	4.79	2.30	57.5	95.0	6.7	1.2
1970	37.1	39.8	37.3	33.8	3.23	3.35	5.24	2.44	61.3	95.7	6.6	.7
1971	36.9	39.9	37.2	33.7	3.45	3.57	5.69	2.60	65.7	98.3	7.2	2.7
1972	37.0	40.5	36.5	33.4	3.70	3.82	6.06	2.75	69.8	101.2	6.2	3.0
1973	36.9	40.7	36.8	33.1	3.94	4.09	6.41	2.91	74.1	101.1	6.2	−.1
1974	36.5	40.0	36.6	32.7	4.24	4.42	6.81	3.14	80.0	98.3	8.0	−2.8
1975	36.1	39.5	36.4	32.4	4.53	4.83	7.31	3.36	86.7	97.6	8.4	−.7
1976	36.1	40.1	36.8	32.1	4.86	5.22	7.71	3.57	92.9	99.0	7.2	1.4
1977	36.0	40.3	36.5	31.6	5.25	5.68	8.10	3.85	100.0	100.0	7.6	1.0
1978	35.8	40.4	36.8	31.0	5.69	6.17	8.66	4.20	108.2	100.5	8.2	.5
1979	35.7	40.2	37.0	30.6	6.16	6.70	9.27	4.53	116.8	97.4	7.9	−3.1
1980	35.3	39.7	37.0	30.2	6.66	7.27	9.94	4.88	127.3	93.5	9.0	−4.0
1981	35.2	39.8	36.9	30.1	7.25	7.99	10.82	5.25	138.9	92.6	9.1	−1.0
1982	34.8	38.9	36.7	29.9	7.68	8.49	11.63	5.48	148.5	93.4	6.9	.9
1983	35.0	40.1	37.1	29.8	8.02	8.83	11.94	5.74	155.4	94.3	4.6	1.6
1984	35.3	40.7	37.7	30.0	8.33	9.18	12.12	5.88	160.7	94.8	3.4	−.1
1985 p	35.1	40.5	37.7	29.7	8.58	9.52	12.26	5.97	165.5	94.3	3.0	−.5
1984: Jan	35.3	40.8	37.7	30.1	8.21	9.04	12.07	5.84	158.6	94.9	3.8	.1
Feb	35.4	41.1	38.3	30.1	8.23	9.07	12.02	5.83	158.7	94.9	3.4	−.4
Mar	35.2	40.7	37.0	30.0	8.25	9.10	12.07	5.85	159.3	95.1	3.7	.1
Apr	35.4	41.0	37.7	30.1	8.30	9.12	12.10	5.86	160.1	95.5	3.8	.7
May	35.3	40.7	37.6	30.1	8.29	9.13	12.14	5.86	159.9	95.0	3.3	.2
June	35.3	40.6	37.8	30.1	8.32	9.16	12.14	5.87	160.5	95.2	3.5	.4
July	35.3	40.5	37.5	30.0	8.35	9.19	12.13	5.88	161.0	95.2	3.4	.3
Aug	35.2	40.5	37.6	29.9	8.35	9.22	12.14	5.87	160.8	94.2	3.4	−.2
Sept	35.3	40.6	37.9	29.9	8.40	9.24	12.15	5.89	161.7	94.3	3.5	−.3
Oct	35.2	40.5	37.7	29.8	8.38	9.28	12.14	5.90	161.6	94.1	2.8	−.8
Nov	35.2	40.5	38.0	29.9	8.42	9.31	12.16	5.93	162.3	94.5	3.1	−.3
Dec	35.2	40.6	37.8	29.9	8.47	9.35	12.20	5.93	163.4	94.9	3.4	−.1
1985: Jan	35.1	40.6	37.7	29.8	8.44	9.38	12.20	5.92	163.0	94.5	2.7	−.5
Feb	35.1	40.1	37.8	29.8	8.49	9.41	12.27	5.94	164.0	94.7	3.3	−.2
Mar	35.2	40.4	38.1	29.8	8.52	9.43	12.22	5.95	164.4	94.5	3.2	−.7
Apr	35.0	40.2	38.0	29.7	8.54	9.48	12.26	5.94	164.8	94.4	2.9	−1.2
May	35.1	40.4	37.6	29.9	8.55	9.49	12.25	5.96	164.9	94.3	3.1	−.9
June	35.1	40.4	37.2	29.9	8.59	9.51	12.23	5.94	165.7	94.5	3.2	−.8
July	35.0	40.3	37.6	29.7	8.57	9.53	12.23	5.95	165.4	94.3	2.7	−1.0
Aug	35.1	40.6	37.5	29.6	8.60	9.56	12.26	5.96	165.7	94.3	3.0	.0
Sept	35.1	40.7	37.9	29.6	8.65	9.56	12.30	6.00	166.7	94.7	3.0	.4
Oct	35.1	40.7	37.9	29.5	8.64	9.58	12.26	5.99	166.4	94.3	3.0	.1
Nov p	35.0	40.7	37.5	29.5	8.67	9.61	12.26	6.00	167.1	94.1	3.0	−.5
Dec p	35.1	41.0	37.2	29.3	8.75	9.65	12.33	6.03	168.4	94.6	3.1	−.5

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[1] Also includes other private industry groups shown in Table B–40.

[2] Adjusted for overtime (in manufacturing only) and for interindustry employment shifts.

[3] Current-dollar earnings index divided by the consumer price index for urban wage earners and clerical workers on a 1977=100 base.

[4] Monthly percent changes are computed from indexes to two decimal places and are based on data not seasonally adjusted.

Note.—See Note, Table B–40.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-42.—*Average weekly earnings in selected private nonagricultural industries, 1947–85*

[For production or nonsupervisory workers; monthly data seasonally adjusted, except as noted]

Year or month	Average gross weekly earnings					Percent change from a year earlier, total private nonagricultural[3]	
	Total private nonagricultural[1]		Manufacturing (current dollars)	Construction (current dollars)	Retail trade (current dollars)		
	Current dollars	1977 dollars[2]				Current dollars	1977 dollars
1947	$45.58	$123.52	$49.13	$58.83	$33.77		
1948	49.00	123.43	53.08	65.23	36.22	7.5	−0.1
1949	50.24	127.84	53.80	67.56	38.42	2.5	3.6
1950	53.13	133.83	58.28	69.68	39.71	5.8	4.7
1951	57.86	134.87	63.34	76.96	42.82	8.9	.8
1952	60.65	138.47	66.75	82.86	43.38	4.8	2.7
1953	63.76	144.58	70.47	86.41	45.36	5.1	4.4
1954	64.52	145.32	70.49	88.54	47.04	1.2	.5
1955	67.72	153.21	75.30	90.90	48.75	5.0	5.4
1956	70.74	157.90	78.78	96.38	50.18	4.5	3.1
1957	73.33	158.04	81.19	100.27	52.20	3.7	.1
1958	75.08	157.40	82.32	103.78	54.10	2.4	−.4
1959	78.78	163.78	88.26	108.41	56.15	4.9	4.1
1960	80.67	164.97	89.72	112.67	57.76	2.4	.7
1961	82.60	167.21	92.34	118.08	58.66	2.4	1.4
1962	85.91	172.16	96.56	122.47	60.96	4.0	3.0
1963	88.46	175.17	99.23	127.19	62.66	3.0	1.7
1964	91.33	178.38	102.97	132.06	64.75	3.2	1.8
1965	95.45	183.21	107.53	138.38	66.61	4.5	2.7
1966	98.82	184.37	112.19	146.26	68.57	3.5	.6
1967	101.84	184.83	114.49	154.95	70.95	3.1	.2
1968	107.73	187.68	122.51	164.49	74.95	5.8	1.5
1969	114.61	189.44	129.51	181.54	78.66	6.4	.9
1970	119.83	186.94	133.33	195.45	82.47	4.6	−1.3
1971	127.31	190.58	142.44	211.67	87.62	6.2	1.9
1972	136.90	198.41	154.71	221.19	91.85	7.5	4.1
1973	145.39	198.35	166.46	235.89	96.32	6.2	−.0
1974	154.76	190.12	176.80	249.25	102.68	6.4	−4.1
1975	163.53	184.16	190.79	266.08	108.86	5.7	−3.1
1976	175.45	186.85	209.32	283.73	114.60	7.3	1.5
1977	189.00	189.00	228.90	295.65	121.66	7.7	1.2
1978	203.70	189.31	249.27	318.69	130.20	7.8	.2
1979	219.91	183.41	269.34	342.99	138.62	8.0	−3.1
1980	235.10	172.74	288.62	367.78	147.38	6.9	−5.8
1981	255.20	170.13	318.00	399.26	158.03	8.5	−1.5
1982	267.26	168.09	330.26	426.82	163.85	4.7	−1.2
1983	280.70	171.26	354.08	442.97	171.05	5.0	1.9
1984	294.05	173.48	373.63	456.92	176.40	4.8	1.3
1985 p	301.16	171.60	385.56	462.20	177.31	2.4	−1.1
1984: Jan	289.81	173.33	368.83	455.04	175.78	5.5	1.8
Feb	291.34	174.14	372.78	460.37	175.48	6.5	2.6
Mar	290.40	173.48	370.37	446.59	175.50	5.5	1.9
Apr	293.82	175.21	373.92	456.17	176.39	5.8	2.6
May	292.64	173.88	371.59	456.46	176.39	4.7	1.5
June	293.70	174.30	371.90	458.89	176.69	4.9	1.8
July	294.76	174.31	372.20	454.88	176.40	4.8	1.6
Aug	293.92	172.19	373.41	456.46	175.51	4.9	1.2
Sept	296.52	172.80	375.14	460.49	176.11	4.4	.6
Oct	294.98	171.80	375.84	457.68	175.82	2.8	−.8
Nov	296.38	172.62	377.06	462.08	177.31	3.3	−.1
Dec	298.14	173.14	379.61	461.16	177.31	4.0	.4
1985: Jan	296.24	171.73	380.83	459.94	176.42	2.0	−1.2
Feb	298.00	172.15	377.34	463.81	177.01	2.1	−1.3
Mar	299.90	172.46	380.97	465.58	177.31	3.3	−.6
Apr	298.90	171.19	381.10	465.88	176.42	2.1	−2.0
May	300.11	171.59	383.40	460.60	178.20	2.4	−1.5
June	301.51	172.00	384.20	454.96	177.61	2.8	−1.2
July	299.95	171.01	384.06	459.85	176.72	1.8	−1.9
Aug	301.86	171.80	388.14	459.75	176.42	2.6	−.4
Sept	303.62	172.51	389.09	466.17	177.60	2.4	−.3
Oct	303.26	171.82	389.91	464.65	176.71	3.0	.1
Nov p	303.45	170.96	391.13	459.75	177.00	2.4	−1.0
Dec p	307.13	172.16	395.65	458.68	176.68	2.9	−.7

[1] Also includes other private industry groups shown in Table B-40.

[2] Earnings in current dollars divided by the consumer price index on a 1977 = 100 base.

[3] Based on data not seasonally adjusted.

Note.—See Note, Table B-40.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B–43.—*Productivity and related data, business sector, 1947–85*

[1977 = 100; quarterly data seasonally adjusted]

Year or quarter	Output per hour of all persons		Output [1]		Hours of all persons [2]		Compensation per hour [3]		Real compensation per hour [4]		Unit labor costs		Implicit price deflator [5]	
	Business sector	Nonfarm business sector	Business sector	Nonfarm business sector	Business sector	Nonfarm business sector	Business sector	Nonfarm business sector	Business sector	Nonfarm business sector	Business sector	Nonfarm business sector	Business sector	Nonfarm business sector
1947	45.1	51.6	36.4	35.4	80.6	68.6	16.6	18.0	45.1	48.9	36.9	34.9	35.3	33.8
1948	47.0	53.1	38.2	37.1	81.2	69.8	18.0	19.6	45.5	49.3	38.4	36.8	38.1	36.5
1949	47.8	54.3	37.5	36.4	78.5	67.1	18.4	20.2	46.7	51.3	38.4	37.1	37.7	36.8
1950	51.6	57.7	41.0	39.9	79.4	69.1	19.7	21.4	49.6	53.9	38.1	37.1	38.4	37.5
1951	53.9	59.6	44.0	43.1	81.7	72.3	21.6	23.3	50.5	54.3	40.1	39.0	40.6	39.5
1952	55.5	60.9	45.4	44.5	81.8	73.1	23.0	24.6	52.5	56.0	41.4	40.4	41.2	40.3
1953	57.7	62.3	47.6	46.6	82.5	74.8	24.5	26.0	55.6	58.8	42.6	41.7	41.5	40.9
1954	58.6	63.2	46.8	45.7	79.8	72.3	25.3	26.8	57.1	60.5	43.2	42.4	41.9	41.5
1955	60.3	65.0	49.9	48.8	82.7	75.2	26.0	27.8	58.7	62.8	43.1	42.8	43.1	42.9
1956	60.7	64.9	50.9	50.0	84.0	77.0	27.7	29.5	61.7	65.7	45.7	45.4	44.7	44.6
1957	62.3	66.2	51.5	50.7	82.7	76.6	29.5	31.2	63.6	67.2	47.4	47.1	46.3	46.2
1958	64.3	67.9	50.7	49.8	78.8	73.3	30.9	32.4	64.7	68.0	48.0	47.8	46.9	46.6
1959	66.4	70.1	54.4	53.6	81.9	76.5	32.2	33.8	67.0	70.3	48.5	48.2	47.8	47.8
1960	67.5	70.9	55.4	54.5	82.0	76.9	33.6	35.3	68.8	72.2	49.8	49.8	48.5	48.5
1961	69.9	73.1	56.4	55.6	80.7	76.1	34.9	36.4	70.7	73.8	49.9	49.8	48.8	48.8
1962	72.4	75.5	59.4	58.7	82.0	77.7	36.5	37.9	73.2	75.9	50.5	50.2	49.7	49.7
1963	75.3	78.2	62.1	61.4	82.5	78.6	37.9	39.3	75.0	77.7	50.4	50.2	50.2	50.2
1964	78.5	81.3	65.8	65.3	83.8	80.4	39.9	41.1	77.9	80.2	50.8	50.5	50.7	50.8
1965	80.9	83.3	70.0	69.5	86.5	83.4	41.4	42.4	79.5	81.5	51.2	51.0	51.8	51.9
1966	83.1	85.1	73.6	73.4	88.6	86.3	44.3	45.0	82.6	83.9	53.3	52.8	53.6	53.5
1967	85.3	87.0	75.6	75.3	88.6	86.5	46.7	47.4	84.7	86.1	54.7	54.5	54.9	55.0
1968	87.6	89.3	78.9	78.8	90.1	88.2	50.3	51.0	87.6	88.8	57.4	57.1	57.4	57.5
1969	87.7	88.9	81.1	80.9	92.4	91.0	53.8	54.3	89.0	89.8	61.4	61.2	60.4	60.4
1970	88.3	89.1	80.3	80.0	90.9	89.8	57.7	58.1	90.1	90.7	65.4	65.2	63.2	63.4
1971	91.2	91.8	82.5	82.2	90.5	89.5	61.5	61.9	92.0	92.6	67.4	67.4	66.4	66.6
1972	94.1	94.7	87.7	87.5	93.3	92.3	65.5	66.0	94.9	95.7	69.6	69.7	69.0	69.0
1973	95.9	96.4	93.0	92.9	96.9	96.3	70.9	71.2	96.7	97.1	73.9	73.9	73.4	72.3
1974	93.9	94.3	91.3	91.2	97.3	96.7	77.6	78.0	95.4	95.9	82.7	82.7	80.5	79.7
1975	95.7	96.0	89.4	89.1	93.4	92.8	85.2	85.6	95.9	96.4	89.0	89.2	88.7	88.3
1976	98.3	98.5	94.6	94.4	96.1	95.9	92.8	92.8	98.7	98.8	94.3	94.2	94.0	93.8
1977	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1978	100.8	100.8	105.8	105.9	104.9	105.1	108.5	108.6	100.8	100.9	107.7	107.7	107.3	107.0
1979	99.6	99.2	107.8	107.9	108.3	108.7	119.1	118.9	99.4	99.2	119.6	119.8	117.0	116.5
1980	99.2	98.8	106.6	106.7	107.5	108.0	131.5	131.3	96.7	96.6	132.6	132.9	127.6	127.8
1981	100.7	99.8	108.9	108.5	108.2	108.7	143.7	143.6	95.7	95.7	142.7	144.0	139.8	140.3
1982	100.3	99.2	105.5	104.9	105.2	105.8	154.9	154.8	97.3	97.2	154.5	156.0	148.1	149.2
1983	102.9	102.6	110.0	110.2	106.9	107.4	161.5	162.1	98.2	98.6	157.0	158.0	153.0	154.2
1984	105.0	104.3	119.0	118.9	113.4	114.1	167.8	168.1	97.9	98.1	159.8	161.2	158.7	159.6
1985 [p]	105.3	104.2	122.3	122.2	116.1	117.3	174.5	174.3	98.3	98.2	165.7	167.2	163.0	164.8
1982 I	99.8	98.8	106.0	105.4	106.2	106.7	151.2	151.2	96.8	96.8	151.6	153.1	145.7	146.8
II	100.2	99.1	105.9	105.5	105.8	106.4	153.8	153.5	97.2	97.0	153.5	154.8	147.3	148.2
III	100.3	99.1	105.1	104.5	104.8	105.4	156.6	156.3	97.2	97.0	156.1	157.6	149.3	150.3
IV	101.1	99.8	105.0	104.2	103.9	104.5	158.3	158.2	97.9	97.9	156.6	158.5	150.2	151.4
1983 I	102.1	101.3	106.6	106.2	104.4	104.8	160.0	160.4	98.9	99.1	156.7	158.3	151.1	152.3
II	103.2	102.9	109.3	109.3	105.9	106.2	160.8	161.6	98.3	98.8	155.9	157.1	152.0	153.6
III	102.9	103.1	110.8	111.4	107.7	108.1	161.5	162.4	97.7	98.3	157.0	157.6	153.7	154.8
IV	103.5	103.1	113.4	113.8	109.5	110.3	163.8	163.9	98.2	98.2	158.3	158.9	154.9	156.1
1984 I	104.7	103.9	117.1	117.1	111.8	112.7	165.9	165.9	98.1	98.1	158.5	159.7	156.6	157.1
II	105.2	104.6	119.2	119.2	113.3	113.9	166.8	167.4	97.7	98.1	158.5	160.0	158.0	158.8
III	105.1	104.3	119.6	119.5	113.8	114.5	168.5	168.8	97.8	98.0	160.3	161.8	159.4	160.5
IV	104.9	104.0	120.1	120.0	114.5	115.4	170.0	170.1	97.9	97.9	162.1	163.6	160.8	161.9
1985 I	105.0	104.1	121.2	121.1	115.5	116.3	171.9	172.1	98.2	98.3	163.8	165.3	161.6	163.0
II	105.2	104.3	121.9	121.8	115.9	116.7	173.5	173.7	98.1	98.2	164.9	166.5	162.7	164.5
III	105.7	104.4	122.6	122.6	116.0	117.4	175.4	174.9	98.6	98.3	166.0	167.6	163.5	165.5
IV [p]	105.3	103.9	123.4	123.3	117.2	118.7	177.2	176.5	98.6	98.2	168.2	169.8	164.6	166.4

[1] Output refers to gross domestic product originating in the sector in 1982 dollars.

[2] Hours of all persons engaged in the sector, including hours of proprietors and unpaid family workers. Estimates based primarily on establishment data.

[3] Wages and salaries of employees plus employers' contributions for social insurance and private benefit plans. Also includes an estimate of wages, salaries, and supplemental payments for the self-employed.

[4] Hourly compensation divided by the consumer price index for all urban consumers.

[5] Current dollar gross domestic product divided by constant dollar gross domestic product.

Note.—Data reflect the comprehensive revision in the national income and product accounts.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B–44.—*Changes in productivity and related data, business sector, 1948–85*

[Percent change from preceding period; quarterly data at seasonally adjusted annual rates]

Year or quarter	Output per hour of all persons		Output [1]		Hours of all persons [2]		Compensation per hour [3]		Real compensation per hour [4]		Unit labor costs		Implicit price deflator [5]	
	Business sector	Nonfarm business sector	Business sector	Nonfarm business sector	Business sector	Nonfarm business sector	Business sector	Nonfarm business sector	Business sector	Nonfarm business sector	Business sector	Nonfarm business sector	Business sector	Nonfarm business sector
1948	4.2	2.9	5.0	4.7	0.8	1.7	8.5	8.5	0.7	0.8	4.1	5.5	8.0	8.1
1949	1.6	2.2	−1.8	−1.7	−3.4	−3.9	1.7	3.0	2.7	4.0	.1	.8	−1.1	.8
1950	8.1	6.2	9.3	9.4	1.1	3.0	7.3	6.1	6.3	5.1	−.7	−.1	1.7	2.0
1951	4.4	3.4	7.5	8.1	2.9	4.6	9.8	8.7	1.7	.7	5.2	5.2	5.9	5.2
1952	3.0	2.1	3.1	3.2	.1	1.0	6.3	5.6	4.0	3.3	3.1	3.4	1.4	2.1
1953	3.8	2.3	4.8	4.8	.9	2.4	6.7	5.7	5.9	4.9	2.8	3.3	.6	1.6
1954	1.7	1.5	−1.8	−1.9	−3.4	−3.4	3.2	3.3	2.8	2.8	1.6	1.7	1.1	1.5
1955	2.8	2.7	6.6	6.9	3.7	4.1	2.5	3.6	2.8	3.9	−.3	.9	2.8	3.4
1956	.7	−.1	2.2	2.4	1.5	2.5	6.7	6.2	5.1	4.6	6.0	6.2	3.8	4.0
1957	2.7	2.0	1.2	1.4	−1.5	−.6	6.5	5.7	3.0	2.2	3.7	3.7	3.4	3.5
1958	3.2	2.6	−1.6	−1.8	−4.7	−4.3	4.6	4.1	1.8	1.3	1.4	1.4	1.4	1.0
1959	3.3	3.2	7.3	7.7	3.9	4.4	4.3	4.1	3.5	3.3	1.0	.9	2.0	2.6
1960	1.7	1.1	1.8	1.7	.1	.6	4.3	4.4	2.7	2.8	2.6	3.3	1.4	1.4
1961	3.5	3.2	1.9	2.0	−1.6	−1.1	3.8	3.3	2.7	2.2	.3	.1	.5	.6
1962	3.6	3.3	5.2	5.5	1.6	2.1	4.7	4.1	3.5	2.9	1.1	.8	1.9	2.0
1963	4.0	3.6	4.6	4.7	.6	1.1	3.8	3.5	2.5	2.3	−.2	−.1	.9	.9
1964	4.3	3.9	6.0	6.3	1.6	2.3	5.2	4.6	3.8	3.3	.8	.7	1.0	1.2
1965	3.0	2.5	6.3	6.4	3.2	3.8	3.8	3.4	2.1	1.7	.9	.8	2.3	2.0
1966	2.8	2.1	5.2	5.6	2.4	3.4	6.9	5.9	3.9	2.9	4.1	3.7	3.3	3.1
1967	2.7	2.3	2.7	2.6	0	.3	5.4	5.5	2.5	2.6	2.6	3.1	2.5	2.9
1968	2.7	2.6	4.4	4.7	1.7	2.0	7.9	7.6	3.5	3.2	5.0	4.8	4.6	4.6
1969	.1	−.5	2.7	2.7	2.6	3.2	7.0	6.6	1.5	1.1	6.9	7.1	5.1	5.0
1970	.7	.3	−.9	−1.0	−1.6	−1.3	7.3	7.0	1.2	1.0	6.5	6.6	4.7	4.9
1971	3.2	3.0	2.7	2.7	−.5	−.3	6.4	6.5	2.1	2.1	3.1	3.3	4.9	5.0
1972	3.2	3.2	6.3	6.4	3.0	3.1	6.6	6.7	3.2	3.3	3.3	3.4	4.0	3.6
1973	2.0	1.8	6.0	6.2	3.9	4.3	8.3	7.9	1.9	1.6	6.2	6.0	6.4	4.8
1974	−2.1	−2.2	−1.8	−1.8	.3	.4	9.5	9.6	−1.3	−1.3	11.9	12.0	9.6	10.2
1975	2.0	1.8	−2.1	−2.3	−4.0	−4.0	9.7	9.7	.5	.5	7.6	7.8	10.3	10.8
1976	2.8	2.6	5.8	6.0	2.9	3.4	8.9	8.4	2.9	2.5	5.9	5.7	5.9	6.3
1977	1.7	1.5	5.8	5.9	4.0	4.3	7.8	7.7	1.3	1.2	6.0	6.1	6.4	6.6
1978	.8	.8	5.8	5.9	4.9	5.1	8.5	8.6	.8	.9	7.7	7.7	7.3	7.0
1979	−1.2	−1.6	1.9	1.8	3.2	3.5	9.7	9.5	−1.4	−1.6	11.1	11.2	9.1	8.9
1980	−.3	−.4	−1.1	−1.1	−.8	−.7	10.5	10.5	−2.7	−2.7	10.8	11.0	9.0	9.7
1981	1.5	1.0	2.1	1.7	.7	.7	9.2	9.4	−1.0	−.9	7.7	8.3	9.6	9.7
1982	−.4	−.6	−3.1	−3.3	−2.7	−2.7	7.8	7.7	1.6	1.5	8.2	8.4	5.9	6.3
1983	2.6	3.4	4.3	5.0	1.7	1.5	4.3	4.7	1.0	1.5	1.6	1.3	3.3	3.4
1984	2.1	1.6	8.2	8.0	6.0	6.3	3.9	3.7	−.4	−.5	1.8	2.0	3.8	3.5
1985 ^{p}	.3	−.0	2.8	2.8	2.4	2.8	4.0	3.7	.5	.1	3.7	3.7	2.7	3.3
1982: I	−.3	0	−5.5	−5.3	−5.2	−5.3	10.4	10.5	6.5	6.5	10.8	10.5	5.5	5.4
II	1.5	1.4	−.2	.2	−1.6	−1.2	6.8	6.1	1.3	.6	5.3	4.6	4.6	4.1
III	.4	.1	−3.1	−3.4	−3.5	−3.5	7.5	7.5	.2	.2	7.0	7.4	5.6	5.7
IV	3.2	2.6	−.4	−1.2	−3.5	−3.7	4.5	5.0	3.0	3.6	1.3	2.4	2.4	3.0
1983: I	4.2	6.3	6.3	7.6	2.0	1.2	4.4	5.6	4.0	5.2	.2	−.7	2.3	2.4
II	4.4	6.3	10.5	12.2	5.9	5.5	2.1	3.2	−2.2	−1.1	−2.1	−2.9	2.6	3.3
III	−1.2	.6	5.8	7.9	7.1	7.3	1.7	1.8	−2.4	−2.3	2.9	1.2	4.4	3.3
IV	2.5	.4	9.5	9.0	6.8	8.6	5.8	3.8	1.7	−.3	3.2	3.5	3.3	3.4
1984: I	4.6	3.0	13.6	12.1	8.7	8.8	5.2	5.0	−.1	−.3	.6	1.9	4.4	2.4
II	2.1	2.9	7.5	7.2	5.4	4.2	2.1	3.7	−1.6	−.1	0	.8	3.7	4.4
III	−.5	−1.2	1.3	1.2	1.8	2.4	4.2	3.4	.5	−.3	4.6	4.7	3.6	4.4
IV	−.7	−1.2	1.7	1.8	2.4	3.1	3.7	3.1	.2	−.5	4.5	4.4	3.5	3.6
1985: I	.1	.5	3.6	3.6	3.4	3.0	4.5	4.8	1.2	1.5	4.4	4.3	2.1	2.7
II	.9	.7	2.3	2.3	1.4	1.6	3.8	3.8	−.4	−.3	2.8	3.1	2.8	3.7
III	1.9	.3	2.5	2.6	.6	2.2	4.5	2.8	2.0	.4	2.5	2.5	2.0	2.6
IV ^{p}	−1.3	−1.8	2.5	2.6	3.9	4.5	4.1	3.5	.0	−.5	5.5	5.4	2.7	2.0

[1] Output refers to gross domestic product originating in the sector in 1982 dollars.

[2] Hours of all persons engaged in the sector, including hours of proprietors and unpaid family workers. Estimates based primarily on establishment data.

[3] Wages and salaries of employees plus employers' contributions for social insurance and private benefit plans. Also includes an estimate of wages, salaries, and supplemental payments for the self-employed.

[4] Hourly compensation divided by the consumer price index for all urban consumers.

[5] Current dollar gross domestic product divided by constant dollar gross domestic product.

Note.—Data relate to all persons engaged in the sector. Percent changes are based on original data and therefore may differ slightly from percent changes based on indexes in Table B–43.

Data reflect the comprehensive revision in the national income and product accounts.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-45.—*Industrial production indexes, major industry divisions, 1939–85*

[1977 = 100; monthly data seasonally adjusted]

Year or month	Total industrial production	Manufacturing: Total	Manufacturing: Durable	Manufacturing: Nondurable	Mining	Utilities
1977 proportion	100.0	84.21	49.10	35.11	9.83	5.96
1939	16.0	15.8	13.6	17.9	37.6	6.9
1940	18.4	18.6	18.1	18.8	41.8	7.6
1941	23.3	23.8	24.2	22.7	44.4	8.6
1942	26.7	27.7	30.7	23.7	45.7	9.7
1943	32.4	34.5	41.8	25.4	46.8	10.7
1944	34.9	37.3	46.1	26.4	50.2	11.4
1945	29.9	31.2	34.9	26.3	49.2	11.6
1946	25.8	25.9	24.4	27.1	48.3	12.0
1947	29.0	28.9	29.0	28.2	54.6	13.0
1948	30.2	30.0	30.3	29.2	57.4	14.5
1949	28.6	28.3	27.5	28.7	50.9	15.5
1950	33.1	33.0	33.5	31.9	56.9	17.6
1951	35.9	35.6	37.7	33.0	62.4	20.1
1952	37.2	37.1	40.0	33.6	61.9	21.8
1953	40.4	40.4	45.2	35.0	63.5	23.6
1954	38.2	37.8	39.9	35.2	62.3	25.4
1955	43.0	42.6	45.6	39.1	69.5	28.4
1956	44.9	44.4	47.1	41.1	73.1	31.2
1957	45.5	44.9	47.4	41.8	73.2	33.3
1958	42.6	41.7	41.5	42.1	67.1	34.9
1959	47.7	47.0	47.7	46.3	70.2	38.4
1960	48.8	48.0	48.5	47.4	71.6	41.1
1961	49.1	48.1	47.6	48.8	72.1	43.4
1962	53.2	52.4	52.8	51.8	74.1	46.6
1963	56.3	55.5	56.3	54.6	77.1	49.8
1964	60.1	59.3	60.3	58.2	80.2	54.1
1965	66.1	65.7	68.6	62.1	83.1	57.4
1966	72.0	71.7	76.2	66.0	87.6	61.8
1967	73.5	73.1	77.0	68.1	89.3	64.9
1968	77.6	77.2	80.8	72.5	92.7	70.2
1969	81.2	80.6	84.0	76.3	96.4	76.4
1970	78.5	77.0	77.6	76.3	98.9	81.1
1971	79.6	78.2	77.3	79.4	96.4	85.0
1972	87.3	86.4	86.3	86.5	98.4	90.4
1973	94.4	94.0	96.3	90.8	99.3	94.0
1974	93.0	92.6	94.3	90.2	98.8	92.8
1975	84.8	83.4	82.6	84.5	96.6	93.7
1976	92.6	91.9	91.1	93.1	97.4	97.4
1977	100.0	100.0	100.0	100.0	100.0	100.0
1978	106.5	107.1	108.2	105.5	103.6	103.1
1979	110.7	111.5	113.9	108.2	106.4	105.9
1980	108.6	108.2	109.1	107.0	112.4	107.3
1981	111.0	110.5	111.1	109.7	117.5	107.1
1982	103.1	102.2	99.9	105.5	109.3	104.8
1983	109.2	110.2	107.7	113.7	102.9	105.2
1984	121.8	123.9	124.8	122.5	110.9	110.9
1985 ᵖ	124.5	127.1	128.2	125.4	108.9	113.2
1984: Jan	118.4	119.6	119.6	119.5	110.9	112.7
Feb	119.3	121.0	121.0	121.0	109.4	109.4
Mar	120.1	122.0	122.2	121.6	109.6	111.6
Apr	120.7	122.8	123.3	121.9	109.8	111.4
May	121.3	123.2	123.8	122.3	111.7	111.6
June	122.3	124.1	124.7	123.2	113.5	111.4
July	123.2	125.4	126.4	123.9	114.8	109.8
Aug	123.5	125.9	127.7	123.2	113.0	110.0
Sept	123.3	125.6	127.2	123.1	113.6	109.7
Oct	122.7	125.5	127.0	123.3	107.2	109.4
Nov	123.4	126.0	127.5	123.8	106.8	112.1
Dec	123.3	125.8	127.4	123.4	108.9	111.6
1985: Jan	123.6	125.9	127.8	123.2	110.5	113.0
Feb	123.7	125.8	127.2	123.8	109.5	115.8
Mar	124.0	126.3	128.0	123.9	110.5	113.9
Apr	124.1	126.6	128.2	124.3	109.6	113.6
May	124.1	126.6	127.9	124.7	109.8	113.7
June	124.3	126.7	127.6	125.5	110.6	113.4
July	124.1	126.9	127.9	125.6	108.7	110.7
Aug	125.2	128.2	129.4	126.6	108.3	110.3
Sept	125.1	127.7	128.3	126.9	108.4	113.2
Oct	124.4	127.1	127.8	126.1	108.0	112.6
Nov ᵖ	125.1	128.0	129.2	126.4	106.3	113.2
Dec ᵖ	126.0	129.0	130.0	127.6	106.6	114.7

Source: Board of Governors of the Federal Reserve System.

TABLE B-46.—*Industrial production indexes, market groupings, 1947–85*

[1977 = 100; monthly data seasonally adjusted]

Year or month	Total industrial production	Final products								Intermediate products	Materials		
		Total	Consumer goods			Equipment					Total [3]	Durable goods	Nondurable goods
			Total [1]	Automotive products	Home goods	Total [2]	Business	Defense and space					
1977 proportion	100.00	44.77	25.52	2.98	3.91	19.25	14.34	3.67		12.94	42.28	20.50	10.09
1947	29.0	29.0	29.9	25.8	26.1	....	25.9	15.2		29.9	28.8	28.5	....
1948	30.2	30.1	30.8	27.0	27.2	....	27.0	17.8		31.6	30.0	29.3	....
1949	28.6	29.1	30.6	26.7	25.2	....	23.6	18.6		29.9	27.3	26.3	....
1950	33.1	32.9	35.0	33.6	34.7	....	25.2	21.9		34.8	32.7	33.1	....
1951	35.9	35.5	34.6	29.8	29.9	....	30.8	53.8		36.5	36.2	37.6	....
1952	37.2	38.1	35.4	26.8	29.9	....	34.9	75.7		36.3	36.7	38.4	....
1953	40.4	40.7	37.5	33.9	33.9	....	36.3	90.6		38.8	40.8	44.9	....
1954	38.2	38.5	37.3	31.5	31.3	....	31.9	79.8		38.7	37.7	38.7	29.1
1955	43.0	41.6	41.6	41.9	36.9	....	34.6	73.1		43.9	44.6	47.4	33.3
1956	44.9	44.1	43.1	34.5	38.8	....	40.1	71.4		45.9	45.7	47.6	34.8
1957	45.5	45.4	44.2	36.1	38.0	....	41.7	74.6		45.9	45.7	47.5	34.7
1958	42.6	43.3	43.8	28.7	35.8	....	35.2	74.9		44.9	41.1	40.0	34.5
1959	47.7	47.5	48.0	36.0	41.1	....	39.5	78.9		49.6	47.4	47.7	39.4
1960	48.8	49.1	49.8	41.2	41.4	....	40.6	81.1		49.9	48.1	48.3	40.1
1961	49.1	49.5	50.9	37.6	42.7	....	39.4	82.4		50.9	48.1	47.1	41.7
1962	53.2	53.7	54.3	45.6	46.4	....	42.8	95.4		54.0	52.4	52.4	45.2
1963	56.3	56.7	57.3	49.9	50.0	....	44.9	102.9		57.0	55.8	55.9	47.9
1964	60.1	59.9	60.5	52.3	54.6	....	50.3	99.6		60.7	60.3	60.9	52.1
1965	66.1	65.8	65.3	64.4	61.9	....	57.6	110.3		64.6	67.2	69.8	57.2
1966	72.0	72.1	68.6	64.2	68.2	....	66.7	129.6		68.6	73.2	76.9	61.8
1967	73.5	75.0	70.3	56.4	69.1	....	68.0	147.8		71.4	72.5	74.2	62.9
1968	77.6	78.6	74.5	67.2	74.0	....	71.0	148.1		75.5	77.3	78.6	69.1
1969	81.2	81.1	77.3	67.5	78.9	....	75.6	141.0		79.6	81.9	82.7	74.8
1970	78.5	78.2	76.4	56.8	76.5	....	72.9	119.4		78.4	79.0	75.1	75.2
1971	79.6	78.9	80.8	72.4	81.0	....	69.3	107.3		80.8	80.2	75.4	78.4
1972	87.3	85.6	87.3	78.1	92.7	83.8	79.0	104.3		90.2	88.4	85.2	86.4
1973	94.4	92.0	91.2	86.2	98.1	93.6	92.4	101.9		96.0	96.8	97.4	92.7
1974	93.0	91.7	88.4	74.5	90.7	96.6	96.5	100.4		92.6	94.8	94.6	93.2
1975	84.8	86.3	84.9	70.2	79.9	88.5	86.1	98.5		83.6	83.2	78.8	82.9
1976	92.6	92.4	93.3	87.1	89.5	91.5	89.3	100.1		92.1	93.0	90.8	93.9
1977	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		100.0	100.0	100.0	100.0
1978	106.5	106.9	104.3	102.4	104.7	110.3	112.2	101.2		106.9	105.9	108.8	105.6
1979	110.7	111.0	103.9	94.9	103.7	120.4	124.7	105.6		110.8	110.3	114.4	109.3
1980	108.6	112.2	102.7	76.1	97.7	124.7	125.1	115.4		106.9	105.3	106.1	103.4
1981	111.0	115.2	104.1	78.8	98.1	129.9	127.6	119.8		107.3	107.7	109.7	107.1
1982	103.1	109.5	101.4	78.1	86.5	120.2	113.6	133.0		101.7	96.7	94.2	96.6
1983	109.2	114.7	109.3	95.1	101.1	121.7	115.4	143.1		111.2	102.8	103.7	106.2
1984	121.8	127.8	118.2	109.8	114.8	140.5	134.9	157.9		124.9	114.6	122.3	111.2
1985 [p]	124.5	132.0	120.5	115.1	110.9	147.2	141.3	173.7		130.6	114.6	121.8	112.1
1984 Jan	118.4	123.4	116.2	110.7	114.9	132.8	127.1	148.8		120.9	112.4	118.1	110.3
Feb	119.3	124.2	116.9	111.2	114.4	133.9	128.5	151.3		121.9	113.3	120.1	111.2
Mar	120.1	125.0	117.3	111.6	113.7	135.3	130.4	151.9		122.8	114.1	120.6	111.8
Apr	120.7	126.1	118.3	110.4	115.0	136.4	131.2	155.6		123.0	114.4	121.6	111.3
May	121.3	126.8	117.7	108.9	114.1	138.8	133.3	156.0		124.2	114.7	121.7	111.4
June	122.3	128.2	118.5	110.4	112.7	141.0	135.5	157.2		125.4	115.2	122.4	111.2
July	123.2	129.2	119.1	110.4	116.4	142.5	137.0	158.5		127.0	115.8	123.5	111.6
Aug	123.5	129.7	118.4	111.6	114.6	144.5	139.1	160.7		126.9	116.1	124.4	111.6
Sept	123.3	129.8	118.3	107.4	114.7	145.0	139.2	163.4		125.6	115.9	124.0	111.4
Oct	122.7	129.9	118.5	104.2	116.9	145.0	139.1	163.5		126.2	114.2	123.7	111.2
Nov	123.4	130.7	119.6	110.2	115.8	145.5	139.8	163.3		127.2	114.6	123.9	110.7
Dec	123.3	130.6	119.7	111.6	114.3	144.9	138.4	165.3		127.3	114.6	123.4	110.7
1985 Jan	123.6	130.4	118.8	114.2	111.6	145.7	140.4	165.3		126.8	115.4	124.2	110.9
Feb	123.7	130.4	119.1	115.4	110.9	145.3	140.0	167.3		127.7	115.4	123.3	111.4
Mar	124.0	130.8	119.8	115.1	112.2	145.4	140.2	169.0		128.6	115.5	123.3	110.3
Apr	124.1	131.3	119.5	113.1	110.2	146.9	142.0	170.1		129.3	115.0	122.8	110.4
May	124.1	131.7	120.0	113.6	110.4	147.1	141.9	171.2		130.3	114.2	120.7	111.3
June	124.3	131.6	120.4	113.4	110.9	146.6	140.7	173.4		131.4	114.3	120.8	111.8
July	124.1	131.8	120.1	115.0	108.4	147.3	141.3	173.9		130.7	113.8	120.2	112.8
Aug	125.2	133.3	121.5	120.0	109.5	149.0	143.0	175.5		132.0	114.5	121.8	113.5
Sept	125.1	133.3	121.8	117.8	109.3	148.6	142.2	177.5		132.3	114.2	120.2	114.7
Oct	124.4	132.0	120.7	112.9	110.1	147.1	140.2	178.9		132.0	114.0	120.3	112.9
Nov [p]	125.1	133.4	122.0	116.6	113.0	148.5	141.9	181.1		132.3	114.2	121.8	112.6
Dec [p]	126.0	134.2	123.0	117.2	114.1	148.9	142.1	182.0		133.2	115.1	122.6	113.4

[1] Includes clothing and consumer staples, not shown separately.

[2] Includes rigs and prefabs, not shown separately.

[3] Includes energy materials, not shown separately.

Source: Board of Governors of the Federal Reserve System.

TABLE B–47.—*Industrial production indexes, selected manufactures, 1947–85*

[1977 = 100; monthly data seasonally adjusted]

Year or month	Durable manufactures								Nondurable manufactures			
	Primary metals		Fabricated metal products	Nonelectrical machinery	Electrical machinery	Transportation equipment		Lumber and products	Apparel products	Printing and publishing	Chemicals and products	Foods
	Total	Iron and steel				Total	Motor vehicles and parts					
1977 proportion	5.33	3.49	6.46	9.54	7.15	9.13	5.25	2.30	2.79	4.54	8.05	7.96
1947	57.8	70.4	40.4	26.7	14.5	26.6	28.8	47.2	47.0	34.3	10.4	41.9
1948	60.1	73.6	41.2	26.8	15.1	29.0	31.2	49.1	49.1	36.0	11.3	41.5
1949	50.5	62.9	37.2	22.9	14.1	29.2	32.0	43.3	48.6	37.0	11.1	41.9
1950	63.6	77.5	45.5	25.7	19.4	34.9	41.2	52.7	52.3	38.8	13.9	43.4
1951	69.2	86.6	48.6	32.6	19.5	38.9	37.8	52.5	51.3	39.5	15.7	44.3
1952	63.2	76.2	47.4	35.5	22.3	45.2	32.4	51.8	54.0	39.4	16.5	45.2
1953	71.6	87.9	53.5	36.9	25.6	56.8	40.8	54.8	54.7	41.2	17.8	46.1
1954	57.9	68.3	48.2	31.6	22.8	49.4	35.1	54.5	54.1	42.9	18.1	47.0
1955	75.3	90.8	55.0	34.6	26.1	56.8	47.1	60.8	59.7	47.2	21.1	49.8
1956	74.8	89.1	55.8	39.7	28.3	55.1	38.2	60.1	61.1	50.2	22.6	52.6
1957	71.6	85.9	57.2	39.6	28.1	59.0	40.1	55.2	60.9	51.9	23.9	53.4
1958	56.8	64.7	51.3	33.2	25.7	46.5	29.6	56.0	59.2	50.7	24.7	54.7
1959	66.4	74.5	57.6	38.8	31.2	52.7	38.5	63.6	65.2	54.1	28.8	57.4
1960	66.1	75.7	57.6	39.0	33.8	54.6	43.4	59.8	66.5	56.3	29.9	59.0
1961	64.9	72.3	56.2	37.9	35.9	51.3	38.1	62.6	66.9	56.5	31.4	60.7
1962	69.6	75.3	61.1	42.5	41.3	59.3	46.3	66.1	69.6	58.6	34.8	62.6
1963	75.1	82.1	63.1	45.4	42.4	65.1	51.3	69.2	72.5	61.7	38.1	64.9
1964	84.7	93.4	67.0	51.7	44.9	66.8	52.7	74.3	75.0	65.5	41.7	67.8
1965	93.2	102.4	73.6	58.2	53.5	79.4	67.3	77.2	79.3	69.7	46.5	69.4
1966	98.9	105.5	78.8	67.6	64.2	85.1	66.2	80.1	81.3	75.0	50.7	72.0
1967	91.4	97.5	82.5	68.9	64.5	83.2	58.2	79.3	80.9	79.1	53.0	75.2
1968	94.7	100.7	86.9	69.5	68.1	90.4	69.7	81.6	82.9	80.4	59.6	77.2
1969	101.9	109.7	88.4	75.2	72.5	89.7	70.0	81.5	85.6	84.3	64.5	79.8
1970	94.8	102.1	81.9	72.8	69.3	75.3	56.3	81.1	82.2	82.0	67.1	81.0
1971	89.9	93.4	81.5	67.6	69.6	81.5	70.6	83.2	83.2	82.7	71.4	83.6
1972	100.7	103.8	89.4	78.5	79.7	87.0	77.1	95.3	88.3	88.2	80.3	88.0
1973	114.3	118.2	99.4	91.7	90.7	99.1	89.8	95.6	89.0	90.6	87.8	89.8
1974	110.7	114.5	95.4	97.7	89.8	90.1	77.5	86.8	85.0	89.2	91.0	91.0
1975	88.2	92.0	82.7	84.5	77.2	81.0	65.7	80.8	77.6	83.5	82.9	90.4
1976	98.7	101.4	91.6	88.8	86.8	92.2	86.5	91.9	91.5	91.2	92.8	95.6
1977	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1978	107.0	107.5	105.7	111.7	112.9	106.3	104.6	102.4	103.1	107.8	106.8	104.3
1979	108.5	108.0	109.4	122.6	125.7	108.3	95.9	102.0	98.3	112.7	111.4	106.7
1980	90.4	86.3	101.8	123.3	130.3	96.9	71.1	92.9	97.3	115.1	106.4	111.4
1981	95.0	92.5	101.6	129.8	134.1	95.1	71.6	90.1	96.1	118.6	112.6	113.7
1982	65.8	57.5	86.6	115.6	128.4	87.6	66.8	82.8	87.3	120.2	103.8	114.9
1983	73.0	66.1	89.1	118.3	143.8	99.2	85.8	100.2	95.3	129.8	114.0	120.4
1984	82.4	73.5	102.8	142.0	172.4	113.6	105.6	109.1	102.8	147.9	121.7	127.1
1985[p]	80.8		108.0	146.4	168.9	123.4	112.3			155.1		
1984: Jan	84.3	77.9	97.2	131.6	163.0	112.1	106.5	106.7	104.1	139.7	118.2	123.4
Feb	85.1	78.1	99.1	133.4	164.6	112.3	106.0	108.1	104.7	141.6	120.1	124.4
Mar	83.6	75.6	102.1	136.5	165.9	112.3	106.5	109.5	104.6	143.5	120.3	125.5
Apr	84.2	76.0	101.5	138.9	169.2	112.0	103.6	110.0	106.1	144.1	119.9	126.8
May	82.8	74.3	101.9	141.9	169.2	111.2	103.4	108.3	104.2	148.2	119.5	126.7
June	80.4	71.0	103.3	143.7	171.4	112.4	104.3	109.8	102.9	149.4	122.1	127.4
July	80.6	69.0	103.7	146.1	175.3	114.2	105.4	107.9	102.3	152.3	122.9	127.8
Aug	84.0	74.6	104.1	147.8	176.2	116.2	108.3	109.4	101.3	151.5	122.0	127.7
Sept	82.9	73.6	104.8	146.5	176.8	114.3	104.6	110.4	100.1	148.8	124.2	128.2
Oct	81.3	71.0	104.8	146.6	178.4	113.4	103.1	110.2	100.5	149.5	123.5	129.1
Nov	80.9	71.1	105.4	145.8	178.9	116.0	107.5	109.5	101.1	153.5	124.3	128.7
Dec	78.4	68.9	105.9	144.6	180.2	117.8	109.5	109.4	102.5	151.2	123.4	129.0
1985: Jan	81.7	71.0	106.4	145.0	176.0	120.4	113.0	109.2	102.6	150.4	125.7	128.2
Feb	80.2	68.5	107.6	144.9	173.2	120.5	112.5	109.1	103.1	150.3	125.8	129.4
Mar	81.8	73.2	108.6	146.5	173.1	120.8	111.3	109.5	101.3	152.6	126.5	128.5
Apr	81.4	71.9	109.1	148.9	168.9	120.7	110.9	110.9	100.2	154.2	125.8	130.8
May	76.4	65.4	108.3	149.1	169.3	120.9	110.5	112.2	100.3	155.4	126.7	131.4
June	78.3	67.6	107.4	145.6	169.5	121.8	110.5	113.5	99.2	156.7	126.4	131.8
July	79.0	68.7	107.3	147.5	165.7	123.7	112.8	113.0	100.6	154.3	126.4	132.2
Aug	82.0	71.6	107.8	149.2	166.1	126.8	116.8	114.8	100.4	156.3	128.2	132.6
Sept	80.3	69.7	107.5	146.5	165.1	126.2	115.3	115.9	101.8	156.2	129.0	132.5
Oct	83.0	74.4	108.4	143.5	164.8	124.6	111.7	116.5	102.6	156.1	127.5	131.0
Nov[p]	84.4	75.8	108.8	144.9	167.3	126.8	114.5		103.6	158.3	126.9	130.6
Dec[p]	83.0		109.9	145.9	168.7	127.7	115.6			160.0		

Source: Board of Governors of the Federal Reserve System.

TABLE B-48.—*Capacity utilization rates, 1948–85*

[Percent; quarterly data seasonally adjusted]

Year or quarter	Total industry	Manufacturing					Mining	Utilities	Industrial materials
		Total	Durable goods	Non-durable goods	Primary processing	Advanced processing			
1948	....	82.5	....	....	87.3	80.0	....	....	....
1949	....	74.2	....	....	76.2	73.2	....	....	....
1950	....	82.8	....	....	88.5	79.8	....	....	....
1951	....	85.8	....	....	90.2	83.4	....	....	....
1952	....	85.4	....	....	84.9	85.9	....	....	....
1953	....	89.3	....	....	89.4	89.3	....	....	....
1954	....	80.1	....	....	80.6	80.0	....	....	....
1955	....	87.0	....	....	92.0	84.2	....	....	....
1956	....	86.1	....	....	89.4	84.4	....	....	....
1957	....	83.6	....	....	84.7	83.1	....	....	....
1958	....	75.0	....	....	75.4	74.9	....	....	....
1959	....	81.6	....	....	83.0	81.1	....	....	....
1960	....	80.1	....	....	79.8	80.5	....	....	....
1961	....	77.3	....	....	77.9	77.2	....	....	....
1962	....	81.4	....	....	81.5	81.6	....	....	....
1963	....	83.5	....	....	83.8	83.4	....	....	....
1964	....	85.6	....	....	87.8	84.6	....	....	....
1965	....	89.5	....	....	91.0	88.8	....	....	....
1966	....	91.1	....	....	91.4	91.1	....	....	....
1967	87.1	86.7	87.0	86.6	85.3	87.6	82.9	93.2	85.1
1968	87.4	87.0	86.7	87.7	86.9	87.0	84.6	93.9	86.8
1969	87.4	86.7	86.1	88.0	87.7	86.1	87.0	95.6	88.1
1970	80.9	79.2	76.1	83.9	80.9	78.3	89.0	95.1	81.8
1971	79.0	77.4	73.3	83.5	79.5	76.1	87.3	93.7	80.4
1972	84.0	82.8	79.7	87.4	86.4	81.1	90.2	94.5	86.0
1973	87.9	87.0	86.2	88.1	91.3	85.1	91.4	92.8	91.1
1974	83.6	82.6	81.6	84.2	85.4	81.5	91.1	86.8	86.1
1975	74.1	72.3	69.6	76.3	72.2	72.6	89.2	84.3	73.4
1976	78.8	77.4	74.8	81.4	79.3	76.8	89.7	85.3	80.3
1977	82.4	81.4	79.4	84.5	83.1	80.5	89.9	85.1	84.1
1978	84.8	84.2	82.9	86.1	86.0	83.1	90.3	85.0	86.3
1979	85.2	84.6	84.1	85.3	86.6	83.5	90.7	85.6	87.1
1980	80.9	79.3	77.9	81.3	77.9	80.0	93.2	85.4	81.1
1981	79.9	78.3	76.7	80.7	78.1	78.3	92.9	84.2	81.1
1982	72.1	70.3	66.9	75.5	67.6	71.7	83.4	81.4	71.7
1983	74.7	74.0	70.3	79.5	74.2	73.9	77.9	80.5	75.3
1984	81.2	80.8	79.0	83.6	81.6	80.4	83.6	83.8	82.3
1985 ^{p}	80.6	80.3	78.3	83.2	82.3	79.3	81.4	83.9	80.2
1984: Jan	80.0	79.2	76.9	82.6	80.1	78.8	83.8	85.6	81.6
Feb	80.4	80.0	77.6	83.4	81.3	79.3	82.7	83.0	82.1
Mar	80.8	80.4	78.2	83.6	81.8	79.6	82.7	84.6	82.5
Apr	81.0	80.7	78.6	83.6	81.6	80.2	82.8	84.3	82.6
May	81.2	80.7	78.7	83.7	81.7	80.3	84.3	84.4	82.6
June	81.6	81.1	79.0	84.1	81.8	80.7	85.5	84.2	82.8
July	82.0	81.7	79.8	84.4	81.7	81.6	86.4	82.9	83.0
Aug	82.0	81.8	80.4	83.7	82.3	81.4	85.0	83.0	83.1
Sept	81.7	81.3	79.9	83.5	82.0	80.9	85.4	82.6	82.7
Oct	81.1	81.1	79.5	83.4	81.8	80.7	80.6	82.4	81.3
Nov	81.3	81.2	79.5	83.6	81.7	80.9	81.7	84.3	81.5
Dec	81.1	80.9	79.3	83.1	80.9	80.8	81.7	83.8	81.3
1985: Jan	81.1	80.7	79.3	82.8	81.6	80.2	82.9	84.7	81.7
Feb	80.9	80.4	78.7	83.0	81.5	79.8	82.1	86.7	81.5
Mar	81.0	80.5	78.9	82.9	81.8	79.8	82.8	85.0	81.4
Apr	80.8	80.5	78.9	83.0	82.1	79.7	82.1	84.6	80.9
May	80.6	80.3	78.5	83.0	81.5	79.8	82.2	84.5	80.1
June	80.5	80.1	78.0	83.4	82.0	79.3	82.7	84.1	80.1
July	80.2	80.1	78.0	83.3	82.3	79.1	81.2	81.9	79.5
Aug	80.7	80.7	78.7	83.7	82.9	79.6	80.9	81.5	79.9
Sept	80.5	80.1	77.8	83.7	82.8	79.0	81.0	83.4	79.5
Oct	79.8	79.5	77.3	83.0	82.9	78.0	80.6	82.8	79.2
Nov ^{p}	80.1	79.9	77.9	83.0	83.0	78.5	79.2	83.1	79.1
Dec ^{p}	80.5	80.3	78.2	83.6	83.4	78.9	79.4	84.0	79.6

Source: Board of Governors of the Federal Reserve System.

Table B–49.—*New construction activity, 1929–85*

[Value put in place, billions of dollars; monthly data at seasonally adjusted annual rates]

Year or month	Total new construction	Private construction							Public construction		
		Total	Residential buildings [1]		Nonresidential buildings and other construction [1]				Total	Federal	State and local [5]
			Total [2]	New housing units	Total	Commercial [3]	Industrial	Other [4]			
1929	10.8	8.3	3.6	3.0	4.7	1.1	0.9	2.6	2.5	0.2	2.3
1933	2.9	1.2	.5	.3	.8	.1	.2	.5	1.6	.5	1.1
1939	8.2	4.4	2.7	2.3	1.7	.3	.3	1.2	3.8	.8	3.1
1940	8.7	5.1	3.0	2.6	2.1	.3	.4	1.3	3.6	1.2	2.4
1941	12.0	6.2	3.5	3.0	2.7	.4	.8	1.5	5.8	3.8	2.0
1942	14.1	3.4	1.7	1.4	1.7	.2	.3	1.2	10.7	9.3	1.3
1943	8.3	2.0	.9	.7	1.1	.0	.2	.9	6.3	5.6	.7
1944	5.3	2.2	.8	.6	1.4	.1	.2	1.1	3.1	2.5	.6
1945	5.8	3.4	1.3	.7	2.1	.2	.6	1.3	2.4	1.7	.7
1946	14.3	12.1	6.2	4.8	5.8	1.2	1.7	3.0	2.2	.9	1.4
New series											
1947	20.0	16.7	9.9	7.8	6.9	1.0	1.7	4.2	3.3	.8	2.5
1948	26.1	21.4	13.1	10.5	8.2	1.4	1.4	5.5	4.7	1.2	3.5
1949	26.7	20.5	12.4	10.0	8.0	1.2	1.0	5.9	6.3	1.5	4.8
1950	33.6	26.7	18.1	15.6	8.6	1.4	1.1	6.1	6.9	1.6	5.2
1951	35.4	26.2	15.9	13.2	10.3	1.5	2.1	6.7	9.3	3.0	6.3
1952	36.8	26.0	15.8	12.9	10.2	1.1	2.3	6.8	10.8	4.2	6.6
1953	39.1	27.9	16.6	13.4	11.3	1.8	2.2	7.3	11.2	4.1	7.1
1954	41.4	29.7	18.2	14.9	11.5	2.2	2.0	7.2	11.7	3.4	8.3
1955	46.5	34.8	21.9	18.2	12.9	3.2	2.4	7.3	11.7	2.8	8.9
1956	47.6	34.9	20.2	16.1	14.7	3.6	3.1	8.0	12.7	2.7	10.0
1957	49.1	35.1	19.0	14.7	16.1	3.6	3.6	9.0	14.1	3.0	11.1
1958	50.0	34.6	19.8	15.4	14.8	3.6	2.4	8.8	15.5	3.4	12.1
1959	55.4	39.3	24.3	19.2	15.1	3.9	2.1	9.0	16.1	3.7	12.3
1960	54.7	38.9	23.0	17.3	15.9	4.2	2.9	8.9	15.9	3.6	12.2
1961	56.4	39.3	23.1	17.1	16.2	4.7	2.8	8.7	17.1	3.9	13.3
1962	60.2	42.3	25.2	19.4	17.2	5.1	2.8	9.2	17.9	3.9	14.0
1963	64.8	45.5	27.9	21.7	17.6	5.0	2.9	9.7	19.4	4.0	15.4
1964	68.0	47.7	28.0	21.8	19.7	5.4	3.6	10.7	20.4	3.9	16.5
1965	74.1	52.0	27.9	21.7	24.1	....	....	....	22.1	4.0	18.0
1966	76.8	52.8	25.7	19.4	27.1	....	....	....	24.0	4.0	20.0
1967	78.5	52.9	25.6	19.0	27.3	....	....	....	25.5	3.5	22.1
1968	87.5	59.9	30.6	24.0	29.3	7.8	6.0	15.5	27.6	3.4	24.2
1969	94.3	66.3	33.2	25.9	33.1	9.4	6.8	16.9	28.0	3.3	24.6
1970	95.2	67.1	31.9	24.3	35.3	9.8	6.5	19.0	28.1	3.3	24.8
1971	110.3	80.4	43.3	35.1	37.2	11.6	5.4	20.1	29.9	4.0	25.9
1972	124.4	94.2	54.3	44.9	40.0	13.5	4.7	21.8	30.2	4.4	25.8
1973	138.4	105.9	59.7	50.1	46.2	15.5	6.2	24.5	32.5	4.9	27.6
1974	139.2	100.9	50.4	40.6	50.5	15.9	7.9	26.7	38.3	5.3	33.0
1975	135.9	95.1	46.5	34.4	48.6	12.8	8.0	27.8	40.9	6.3	34.6
1976	154.9	115.8	64.3	51.1	51.4	12.8	7.2	31.5	39.1	7.0	32.1
1977	180.8	142.6	87.9	72.7	54.7	14.8	7.7	32.2	38.2	7.3	30.9
1978	215.9	170.0	103.8	86.2	66.2	18.6	11.0	36.7	45.9	8.4	37.5
1979	241.9	193.1	110.5	90.1	82.6	24.9	15.0	42.7	48.8	8.6	40.2
1980	238.0	183.0	94.5	70.4	88.4	29.9	13.8	44.7	55.0	9.6	45.4
1981	246.7	193.3	94.1	70.2	99.2	34.2	17.0	47.9	53.3	10.4	42.9
1982	236.9	186.1	80.6	57.7	105.5	37.3	17.3	50.9	50.8	10.0	40.8
1983	268.7	218.0	121.3	95.7	96.7	35.8	12.9	48.1	50.7	10.6	40.2
1984	313.0	257.8	145.1	114.6	112.7	48.1	13.7	50.9	55.2	11.2	44.0

See next page for continuation of table

TABLE B-49.—*New construction activity, 1929–85*—Continued

[Value put in place, billions of dollars; monthly data at seasonally adjusted annual rates]

Year or month	Total new construction	Private construction							Public construction		
		Total	Residential buildings [1]		Nonresidential buildings and other construction [1]				Total	Federal	State and local [5]
			Total [2]	New housing units	Total	Commercial [3]	Industrial	Other [4]			
1984: Jan	284.4	233.3	132.7	107.6	100.6	40.1	12.2	48.3	51.1	10.2	40.9
Feb	302.5	249.6	146.1	112.0	103.5	41.8	12.8	48.8	52.9	10.5	42.4
Mar	309.4	255.9	150.1	112.9	105.8	44.1	13.6	48.1	53.5	10.8	42.6
Apr	309.9	255.6	146.6	113.5	109.0	45.6	13.2	50.2	54.3	11.3	43.0
May	315.7	261.5	148.4	117.0	113.2	47.7	13.7	51.8	54.2	11.2	43.0
June	317.8	260.8	147.7	116.8	113.1	47.8	13.2	52.2	56.9	11.7	45.2
July	319.1	263.5	150.3	117.9	113.2	47.6	13.5	52.1	55.6	10.5	45.1
Aug	321.2	265.4	149.8	117.0	115.6	49.1	14.0	52.5	55.9	11.2	44.7
Sept	321.0	264.3	149.4	116.3	115.0	50.8	14.7	49.5	56.6	12.0	44.6
Oct	318.2	262.0	144.0	115.9	117.9	52.1	14.3	51.5	56.2	11.3	44.9
Nov	313.1	257.5	137.9	113.5	119.6	52.5	14.6	52.4	55.6	11.9	43.7
Dec	310.1	254.5	134.3	111.9	120.3	54.5	14.4	51.3	55.5	11.5	44.0
1985: Jan	341.0	283.7	155.3	113.0	128.4	58.5	15.2	54.7	57.4	11.8	45.5
Feb	334.3	276.5	146.0	110.3	130.4	58.9	15.8	55.7	57.8	11.7	46.1
Mar	333.7	274.6	146.2	110.8	128.4	59.4	14.6	54.4	59.1	11.7	47.5
Apr	341.9	282.0	146.5	112.6	135.4	61.2	17.3	56.9	59.9	11.3	48.6
May	339.9	276.4	142.3	112.0	134.2	60.1	16.4	57.7	63.5	12.5	51.0
June	343.8	278.9	147.2	112.2	131.8	58.3	15.2	58.3	64.9	13.1	51.8
July	344.2	279.5	148.7	112.8	130.8	58.0	15.4	57.5	64.7	13.0	51.7
Aug	343.2	279.4	146.9	113.4	132.5	59.9	15.1	57.5	63.9	12.0	51.8
Sept	346.1	282.5	148.9	113.8	133.6	61.2	15.6	56.8	63.6	12.5	51.0
Oct	346.3	282.7	150.6	115.9	132.1	60.8	15.4	55.8	63.6	12.7	50.9
Nov [p]	348.2	283.7	150.3	115.9	133.4	61.5	15.5	56.3	64.5	13.1	51.4

[1] Beginning 1960, farm residential buildings included in residential buildings; prior to 1960, included in nonresidential buildings and other construction.

[2] Total includes additions and alterations and nonhousekeeping units, not shown separately.

[3] Office buildings, warehouses, stores, restaurants, garages, etc.

[4] Religious, educational, hospital and institutional, miscellaneous nonresidential, farm (see also footnote 1), public utilities, and all other private.

[5] Includes Federal grants-in-aid for State and local projects.

Note.—Data beginning 1976 are not strictly comparable with earlier data.

Source: Department of Commerce, Bureau of the Census.

TABLE B-50.—*New housing units started and authorized, 1959–85*

[Thousands of units]

Year or month	New housing units started						New private housing units authorized [2]			
	Private and public [1]		Private (farm and nonfarm) [1]				Total	Type of structure		
	Total (farm and nonfarm)	Nonfarm	Total	Type of structure				1 unit	2 to 4 units	5 units or more
				1 unit	2 to 4 units	5 units or more				
1959	1,553.7	1,531.3	1,517.0	1,234.0	283.0		1,208.3	938.3	77.1	192.9
1960	1,296.1	1,274.0	1,252.2	994.7	257.4		998.0	746.1	64.6	187.4
1961	1,365.0	1,336.8	1,313.0	974.3	338.7		1,064.2	722.8	67.6	273.8
1962	1,492.5	1,468.7	1,462.9	991.4	471.5		1,186.6	716.2	87.1	383.3
1963	1,634.9	1,614.8	1,603.2	1,012.4	590.8		1,334.7	750.2	118.9	465.6
1964	1,561.0	1,534.0	1,528.8	970.5	108.4	450.0	1,285.8	720.1	100.8	464.9
1965	1,509.7	1,487.5	1,472.8	963.7	86.6	422.5	1,239.8	709.9	84.8	445.1
1966	1,195.8	1,172.8	1,164.9	778.6	61.1	325.1	971.9	563.2	61.0	347.7
1967	1,321.9	1,298.8	1,291.6	843.9	71.6	376.1	1,141.0	650.6	73.0	417.5
1968	1,545.4	1,521.4	1,507.6	899.4	80.9	527.3	1,353.4	694.7	84.3	574.4
1969	1,499.5	1,482.3	1,466.8	810.6	85.0	571.2	1,323.7	625.9	85.2	612.7
1970	1,469.0	(3)	1,433.6	812.9	84.8	535.9	1,351.5	646.8	88.1	616.7
1971	2,084.5	(3)	2,052.2	1,151.0	120.3	780.9	1,924.6	906.1	132.9	885.7
1972	2,378.5	(3)	2,356.6	1,309.2	141.3	906.2	2,218.9	1,033.1	148.6	1,037.2
1973	2,057.5	(3)	2,045.3	1,132.0	118.3	795.0	1,819.5	882.1	117.0	820.5
1974	1,352.5	(3)	1,337.7	888.1	68.1	381.6	1,074.4	643.8	64.3	366.2
1975	1,171.4	(3)	1,160.4	892.2	64.0	204.3	939.2	675.5	63.9	199.8
1976	1,547.6	(3)	1,537.5	1,162.4	85.9	289.2	1,296.2	893.6	93.1	309.5
1977	[1]2,001.7	(3)	1,987.1	1,450.9	121.7	414.4	1,690.0	1,126.1	121.3	442.7
1978	2,036.1	(3)	2,020.3	1,433.3	125.0	462.0	1,800.5	1,182.6	130.6	487.3
1979	1,760.0	(3)	1,745.1	1,194.1	122.0	429.0	1,551.8	981.5	125.4	444.8
1980	1,312.6	(3)	1,292.2	852.2	109.5	330.5	1,190.6	710.4	114.5	365.7
1981	1,100.3	(3)	1,084.2	705.4	91.1	287.7	985.5	564.3	101.8	319.4
1982	1,072.1	(3)	1,062.2	662.6	80.0	319.6	1,000.5	546.4	88.3	365.8
1983	1,712.5	(3)	1,703.0	1,067.6	113.5	522.0	1,605.2	901.5	133.6	570.1
1984	1,755.8	(3)	1,749.5	1,084.2	121.4	544.0	1,681.8	922.4	142.6	616.8
1985 [p]	1,735.9	(3)	1,732.8	1,070.2	93.7	568.9	1,740.8	961.1	123.4	656.3
			Seasonally adjusted annual rates							
1984: Jan	109.3	(3)	1,933	1,256	117	560	1,840	1,023	147	670
Feb	130.4	(3)	2,208	1,440	142	626	1,976	1,127	165	684
Mar	138.1	(3)	1,700	1,076	133	491	1,739	981	160	598
Apr	173.0	(3)	1,949	1,163	160	626	1,788	972	155	661
May	182.2	(3)	1,787	1,118	118	551	1,765	944	156	665
June	184.3	(3)	1,837	1,077	108	652	1,805	939	150	716
July	163.1	(3)	1,730	996	116	618	1,591	864	142	585
Aug	147.8	(3)	1,590	962	114	514	1,542	853	132	557
Sept	149.6	(3)	1,669	1,009	107	553	1,517	866	125	526
Oct	152.7	(3)	1,564	979	109	476	1,477	827	121	529
Nov	126.5	(3)	1,600	1,043	115	442	1,616	846	127	643
Dec	99.0	(3)	1,630	1,112	119	399	1,599	843	132	624
1985: Jan	105.4	(3)	1,849	1,060	105	684	1,635	903	150	582
Feb	95.8	(3)	1,647	1,135	96	416	1,624	927	114	583
Mar	145.2	(3)	1,889	1,168	106	615	1,741	993	138	610
Apr	176.0	(3)	1,933	1,155	113	665	1,704	948	118	638
May	170.5	(3)	1,681	1,039	109	533	1,778	933	131	714
June	163.4	(3)	1,701	1,031	92	578	1,712	961	130	621
July	161.0	(3)	1,663	1,062	86	515	1,694	967	121	606
Aug	161.1	(3)	1,740	1,059	97	584	1,784	990	127	667
Sept	148.6	(3)	1,616	975	83	558	1,808	949	127	732
Oct	173.2	(3)	1,772	1,120	77	575	1,688	965	112	611
Nov	120.9	(3)	1,566	961	80	525	1,661	918	111	632
Dec [p]	114.7	(3)	1,840	1,113	91	636	1,873	978	123	772

[1] Units in structures built by private developers for sale upon completion to local public housing authorities under the Department of Housing and Urban Development "Turnkey" program are classified as private housing. Military housing starts, including those financed with mortgages insured by FHA under Section 803 of the National Housing Act, are included in publicly owned starts and excluded from total private starts.

[2] Authorized by issuance of local building permit: in 17,000 permit-issuing places beginning 1984; in 16,000 places for 1978-83; in 14,000 places for 1972-77; in 13,000 places for 1967-71; in 12,000 places for 1963-66; and in 10,000 places prior to 1963.

[3] Not available separately beginning January 1970.

Source: Department of Commerce, Bureau of the Census.

Table B-51.—*Business expenditures for new plant and equipment, 1947–86*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Industries surveyed quarterly									Addenda				
	All industries	Manufacturing			Nonmanufacturing					Total nonfarm business [2]	Manufacturing	Nonmanufacturing		
		Total	Durable goods	Nondurable goods	Total [1]	Mining	Transportation	Public utilities	Commercial and other			Total	Surveyed quarterly	Surveyed annually [3]
1947	20.11	8.73	3.39	5.34	11.38	0.69	2.69	1.64	6.38	22.27	8.73	13.54	11.38	2.16
1948	22.78	9.25	3.54	5.71	13.53	.93	3.17	2.67	6.77	25.97	9.25	16.73	13.53	3.19
1949	20.28	7.32	2.67	4.64	12.96	.88	2.80	3.28	6.01	24.03	7.32	16.72	12.96	3.76
1950	21.56	7.73	3.22	4.51	13.83	.84	2.87	3.42	6.70	25.81	7.73	18.08	13.83	4.25
1951	26.81	11.07	5.12	5.95	15.74	1.11	3.60	3.75	7.29	31.38	11.07	20.31	15.74	4.57
1952	28.16	12.12	5.75	6.37	16.04	1.21	3.56	3.96	7.31	32.16	12.12	20.04	16.04	4.00
1953	29.96	12.43	5.71	6.72	17.53	1.25	3.58	4.61	8.09	34.20	12.43	21.77	17.53	4.23
1954	28.86	12.00	5.49	6.51	16.85	1.29	2.91	4.23	8.42	33.62	12.00	21.62	16.85	4.76
1955	30.94	12.50	5.87	6.62	18.44	1.31	3.10	4.26	9.77	37.08	12.50	24.58	18.44	6.14
1956	37.90	16.33	8.19	8.15	21.57	1.64	3.56	4.78	11.59	45.25	16.33	28.91	21.57	7.35
1957	40.54	17.50	8.59	8.91	23.04	1.69	3.84	5.95	11.56	48.62	17.50	31.11	23.04	8.08
1958	33.84	12.98	6.21	6.77	20.86	1.43	2.72	5.74	10.97	42.55	12.98	29.57	20.86	8.72
1959	35.88	13.76	6.72	7.04	22.12	1.35	3.47	5.46	11.84	45.17	13.76	31.41	22.12	9.29
1960	39.44	16.36	8.28	8.08	23.08	1.29	3.54	5.40	12.86	48.99	16.36	32.63	23.08	9.55
1961	38.34	15.53	7.43	8.10	22.80	1.26	3.14	5.20	13.21	48.14	15.53	32.60	22.80	9.80
1962	40.86	16.03	7.81	8.22	24.83	1.41	3.59	5.12	14.71	51.61	16.03	35.58	24.83	10.75
1963	43.67	17.27	8.64	8.63	26.40	1.26	3.64	5.33	16.17	53.59	17.27	36.33	26.40	9.93
1964	51.26	21.23	10.98	10.25	30.04	1.33	4.71	5.80	18.20	62.02	21.23	40.80	30.04	10.76
1965	59.52	25.41	13.49	11.92	34.12	1.36	5.66	6.49	20.50	70.79	25.41	45.39	34.12	11.27
1966	70.40	31.37	17.23	14.15	39.03	1.42	6.68	7.82	23.11	82.62	31.37	51.25	39.03	12.22
1967	72.75	32.25	17.83	14.42	40.50	1.38	6.57	9.33	23.22	83.82	32.25	51.57	40.50	11.07
1968	76.42	32.34	17.93	14.40	44.08	1.44	6.91	10.52	25.22	88.92	32.34	56.58	44.08	12.50
1969	85.74	36.27	19.97	16.31	49.47	1.77	7.23	11.70	28.77	100.02	36.27	63.74	49.47	14.27
1970	91.91	36.99	19.80	17.19	54.92	2.02	7.17	13.03	32.71	106.15	36.99	69.16	54.92	14.24
1971	92.91	33.60	16.78	16.82	59.31	2.67	6.42	14.70	35.52	109.18	33.60	75.58	59.31	16.26
1972	103.40	35.42	18.22	17.20	67.98	2.88	7.14	16.26	41.69	120.91	35.42	85.49	67.98	17.51
1973	120.03	42.35	22.63	19.72	77.67	3.30	8.00	17.99	48.39	139.26	42.35	96.91	77.67	19.24
1974	139.67	52.48	26.77	25.71	87.19	4.58	9.16	19.96	53.49	159.83	52.48	107.35	87.19	20.16
1975	142.42	53.66	25.37	28.28	88.76	6.12	9.95	20.23	52.47	162.60	53.66	108.95	88.76	20.19
1976	158.44	58.53	27.50	31.03	99.91	7.63	11.10	22.90	58.29	179.91	58.53	121.38	99.91	21.47
1977	184.82	67.48	32.77	34.71	117.34	9.81	12.20	27.83	67.51	208.15	67.48	140.67	117.34	23.33
1978	217.76	78.58	39.46	39.13	139.18	11.22	13.36	31.50	83.09	245.34	78.58	166.76	139.18	27.58
1979	254.96	95.92	48.50	47.42	159.04	12.81	16.05	35.63	94.56	284.94	95.92	189.02	159.04	29.98
1980	282.80	112.33	55.36	56.96	170.47	15.99	16.60	37.74	100.14	314.47	112.33	202.15	170.47	31.68
1981	315.22	126.54	59.81	66.73	188.68	21.39	15.84	41.21	110.24	349.26	126.54	222.72	188.68	34.04
1982	310.58	120.68	55.35	65.33	189.89	20.05	14.79	45.43	109.63	347.47	120.68	226.79	189.89	36.89
1983	304.78	116.20	53.08	63.12	188.58	15.19	13.97	44.96	114.45	343.35	116.20	227.15	188.58	38.56
1984	354.44	138.82	66.24	72.58	215.61	16.86	16.52	47.48	134.75	398.99	138.82	260.16	215.61	44.55
1985 [4]	384.22	152.42	72.53	79.89	231.79	15.84	17.77	48.23	149.96	....	152.42	....	231.79	....
1986 [4]	393.52	152.30	70.76	81.54	241.23	14.85	18.67	46.13	161.58	....	152.30	....	241.23	....
1984: I	337.95	129.91	61.23	68.68	208.04	17.24	15.29	47.08	128.42	....	129.91	....	208.04	....
II	349.97	135.96	64.03	71.93	214.01	16.38	17.01	47.94	132.67	....	135.96	....	214.01	....
III	361.48	142.44	68.26	74.18	219.04	16.82	17.49	47.92	136.80	....	142.44	....	219.04	....
IV	368.29	146.96	71.43	75.53	221.33	17.00	16.28	46.92	141.13	....	146.96	....	221.33	....
1985: I	371.16	145.65	69.87	75.78	225.51	15.66	16.22	48.46	145.17	....	145.65	....	225.51	....
II	387.83	154.33	73.96	80.36	233.51	16.51	17.50	48.47	151.02	....	154.33	....	233.51	....
III	388.90	154.04	72.85	81.19	234.86	15.94	19.09	48.14	151.69	....	154.04	....	234.86	....
IV [4]	388.98	155.68	73.46	82.22	233.30	15.24	18.25	47.85	151.96	....	155.68	....	233.30	....
1986: I [4]	402.13	154.74	71.95	82.79	247.39	15.30	18.80	48.99	164.30	....	154.74	....	247.39	....
II [4]	405.99	159.16	74.55	84.60	246.83	15.75	18.98	47.53	164.57	....	159.16	....	246.83	....

[1] Excludes forestry, fisheries, and agricultural services; medical services; professional services; social services and membership organizations; and real estate, which, effective with the April-May 1984 survey, are no longer surveyed quarterly. See last column ("nonmanufacturing surveyed annually") for data for these industries.

[2] "All industries" plus the part of nonmanufacturing that is surveyed annually.

[3] Consists of forestry, fisheries, and agricultural services; medical services; professional services; social services and membership organizations; and real estate.

[4] Planned capital expenditures as reported by business in late October and November 1985, corrected for biases.

Source: Department of Commerce, Bureau of Economic Analysis.

Table B-52.—*Sales and inventories in manufacturing and trade 1948–85*

[Amounts in millions of dollars; monthly data seasonally adjusted]

Year or month	Total manufacturing and trade			Manufacturing			Merchant wholesalers			Retail trade		
	Sales [1]	Inventories [2]	Ratio [3]	Sales [1]	Inventories [2]	Ratio [3]	Sales [1]	Inventories [2]	Ratio [3]	Sales [1]	Inventories [2]	Ratio [3]
1948	35,260	52,507	1.42	17,316	28,543	1.57	6,808	7,957	1.13	11,135	16,007	1.39
1949	33,788	49,497	1.53	16,126	26,321	1.75	6,514	7,706	1.19	11,149	15,470	1.41
1950	38,596	59,822	1.36	18,634	31,078	1.48	7,695	9,284	1.07	12,268	19,460	1.38
1951	43,356	70,242	1.55	21,714	39,306	1.66	8,597	9,886	1.16	13,046	21,050	1.64
1952	44,840	72,377	1.58	22,529	41,136	1.78	8,782	10,210	1.12	13,529	21,031	1.52
1953	47,987	76,122	1.58	24,843	43,948	1.76	9,052	10,686	1.17	14,091	21,488	1.53
1954	46,443	73,175	1.60	23,355	41,612	1.81	8,993	10,637	1.18	14,095	20,926	1.51
1955	51,694	79,516	1.47	26,480	45,069	1.62	9,893	11,678	1.13	15,321	22,769	1.43
1956	54,063	87,304	1.55	27,740	50,642	1.73	10,513	13,260	1.19	15,811	23,402	1.47
1957	55,879	89,052	1.59	28,736	51,871	1.80	10,475	12,730	1.23	16,667	24,451	1.44
1958	54,201	87,093	1.60	27,247	50,241	1.84	10,257	12,739	1.24	16,696	24,113	1.43
1959	59,729	92,129	1.50	30,286	52,945	1.70	11,491	13,879	1.15	17,951	25,305	1.40
1960	60,827	94,713	1.56	30,879	53,780	1.75	11,656	14,120	1.22	18,294	26,813	1.45
1961	61,159	95,594	1.54	30,923	54,885	1.74	11,988	14,488	1.20	18,249	26,221	1.43
1962	65,662	101,063	1.50	33,357	58,186	1.70	12,674	14,936	1.16	19,630	27,941	1.38
1963	68,995	105,480	1.49	35,058	60,046	1.69	13,382	16,048	1.15	20,556	29,386	1.39
1964	73,682	111,503	1.47	37,331	63,409	1.64	14,529	17,000	1.14	21,823	31,094	1.40
1965	80,283	120,907	1.45	40,995	68,185	1.60	15,611	18,317	1.15	23,677	34,405	1.39
1966	87,187	136,790	1.47	44,870	77,952	1.62	16,987	20,765	1.15	25,330	38,073	1.44
1967	90,419	144,920	1.56	46,487	84,666	1.76	19,520	24,955	1.24	24,413	35,299	1.43
1968	98,184	155,831	1.53	50,228	90,618	1.74	20,926	26,268	1.23	27,030	38,945	1.38
1969	105,088	169,482	1.55	53,501	98,203	1.77	22,694	28,762	1.21	28,893	42,517	1.41
1970	107,536	177,719	1.62	52,805	101,653	1.90	24,031	32,199	1.26	30,700	43,867	1.41
1971	116,110	187,929	1.58	55,906	102,656	1.83	26,350	35,210	1.27	33,853	50,063	1.41
1972	130,144	202,132	1.49	63,027	108,237	1.67	29,695	38,816	1.24	37,422	55,079	1.40
1973	153,566	233,419	1.41	72,931	124,626	1.58	38,173	45,556	1.11	42,462	63,237	1.40
1974	177,861	286,098	1.45	84,790	157,792	1.65	47,989	57,239	1.07	45,082	71,067	1.48
1975	182,404	288,651	1.57	86,589	159,935	1.84	46,803	56,972	1.21	49,012	71,744	1.44
1976	204,463	318,833	1.48	98,797	175,195	1.69	50,885	64,365	1.19	54,781	79,273	1.38
1977	230,000	351,459	1.46	113,202	189,214	1.61	56,364	72,801	1.21	60,434	89,444	1.39
1978	260,810	399,561	1.44	126,905	210,509	1.57	66,674	86,442	1.20	67,231	102,610	1.43
1979	298,344	451,354	1.43	143,936	241,100	1.57	79,481	99,348	1.18	74,926	110,906	1.44
1980	328,074	493,958	1.45	154,391	264,281	1.66	93,721	113,623	1.14	79,963	116,054	1.42
1981	356,927	527,739	1.44	168,129	282,645	1.64	102,021	118,438	1.13	86,777	126,656	1.40
1982	344,656	509,213	1.51	159,027	264,909	1.73	96,290	118.290	1.24	89,339	126.014	1.40
1983	368,747	520,281	1.38	170,441	260,682	1.52	100,448	120,476	1.17	97,858	139,123	1.34
1984	411,733	573,434	1.34	189,578	285,709	1.45	114.071	132,208	1.11	108,085	155,517	1.37
1984: Jan	402,489	524,733	1.30	184,558	261,494	1.42	111,795	121.337	1.09	106,136	141.902	1.34
Feb	402,395	532,141	1.32	185,616	264,315	1.42	111,053	122,918	1.11	105,726	144,908	1.37
Mar	404,612	538,817	1.33	187.940	268,234	1.43	112,147	123,977	1.11	104,525	146,606	1.40
Apr	408,342	545,926	1.34	187,669	270,640	1.44	113,230	125,659	1.11	107,443	149,627	1.39
May	412,524	550,503	1.33	188,397	274,268	1.46	116,186	126,742	1.09	107,941	149,493	1.38
June	413,976	552,421	1.33	189,255	277,207	1.46	115,636	126,745	1.10	109,085	148,469	1.36
July	412,233	557,168	1.35	189,896	279,774	1.47	114,774	128,577	1.12	107,563	148,817	1.38
Aug	413,300	561,715	1.36	191,155	282,774	1.48	114,749	129,433	1.13	107,396	149,508	1.39
Sept	412,276	565,475	1.37	189,330	284,531	1.50	114,573	130,610	1.14	108,373	150,334	1.39
Oct	414,243	568,750	1.37	191,275	285,597	1.49	113,994	131,023	1.15	108,974	152,130	1.40
Nov	417,635	571,239	1.37	193,043	285,668	1.48	114,337	132,501	1.16	110,255	153,070	1.39
Dec	421,613	573,434	1.36	196,181	285,709	1.46	114,913	132,208	1.15	110,519	155,517	1.41
1985: Jan	417,350	575,802	1.38	191,724	285,785	1.49	114,654	132,247	1.15	110,972	157,770	1.42
Feb	418,667	578,940	1.38	192,261	286,146	1.49	114,310	133,631	1.17	112,096	159,163	1.42
Mar	420,776	578,768	1.38	194,303	286,171	1.47	114,619	133,865	1.17	111,854	158,732	1.42
Apr	426,472	580,201	1,36	193,509	286,049	1.48	117,612	133,968	1.14	115,351	160,184	1.39
May	428,275	577,781	1.35	194,638	284,900	1.46	118,753	134,014	1.13	114,884	158,867	1.38
June	418,378	579,665	1.39	193,871	285,678	1.47	110,777	135,479	1.22	113,730	158,508	1.39
July	422,483	580,116	1.37	193,793	285,036	1.47	114,273	135,841	1.19	114,417	159,239	1.39
Aug	430,417	578,182	1.34	196,593	284,688	1.45	116,847	135,500	1.16	116,977	157,994	1.35
Sept	428,998	578,918	1.35	194,229	284,030	1.46	115,231	134,967	1.17	119,538	159,921	1.34
Oct	426,033	582,173	1.37	197,229	282,444	1.43	113,944	135,531	1.19	114,860	164,198	1.43
Nov	432,110	583,600	1.35	200,131	281,993	1.41	116,359	135,596	1.17	115,620	166,011	1.44

[1] Monthly average for year and total for month.

[2] Seasonally adjusted, end of period.

[3] Inventory/sales ratio. For annual periods, ratio of weighted average inventories to average monthly sales; for monthly data, ratio of inventories at end of month to sales for month.

Note.—Earlier data are not strictly comparable with data beginning 1958 for manufacturing and beginning 1967 for wholesale and retail trade.

The inventory figures in this table do not agree with the estimates of change in business inventories included in the gross national product since these figures cover only manufacturing and trade rather than all business, and show inventories in terms of current book value without adjustment for revaluation.

Source: Department of Commerce, Bureau of the Census.

TABLE B–53.—*Manufacturers' shipments and inventories, 1947–85*

[Millions of dollars; monthly data seasonally adjusted]

Year or month	Shipments [1]			Inventories [2]								
	Total	Durable goods industries	Nondurable goods industries	Total	Durable goods industries				Nondurable goods industries			
					Total	Materials and supplies	Work in process	Finished goods	Total	Materials and supplies	Work in process	Finished goods
1947	15,513	6,694	8,819	25,897	13,061	....	....	....	12,836	....	....	....
1948	17,316	7,579	9,738	28,543	14,662	....	....	....	13,881	....	....	....
1949	16,126	7,191	8,935	26,321	13,060	....	....	....	13,261	....	....	....
1950	18,634	8,845	9,789	31,078	15,539	....	....	....	15,539	....	....	....
1951	21,714	10,493	11,221	39,306	20,991	....	....	....	18,315	....	....	....
1952	22,529	11,313	11,216	41,136	23,731	....	....	....	17,405	....	....	....
1953	24,843	13,349	11,494	43,948	25,878	8,966	10,720	6,206	18,070	8,317	2,472	7,409
1954	23,355	11,828	11,527	41,612	23,710	7,894	9,721	6,040	17,902	8,167	2,440	7,415
1955	26,480	14,071	12,409	45,069	26,405	9,194	10,756	6,348	18,664	8,556	2,571	7,666
1956	27,740	14,715	13,025	50,642	30,447	10,417	12,317	7,565	20,195	8,971	2,721	8,622
1957	28,736	15,237	13,499	51,871	31,728	10,608	12,837	8,125	20,143	8,775	2,864	8,624
1958	27,247	13,563	13,684	50,241	30,258	10,032	12,387	7,839	19,983	8,662	2,828	8,491
1959	30,286	15,609	14,677	52,945	32,077	10,776	13,063	8,239	20,868	9,080	2,944	8,845
1960	30,879	15,883	14,996	53,780	32,371	10,353	12,772	9,245	21,409	9,082	2,946	9,380
1961	30,923	15,616	15,307	54,885	32,544	10,279	13,203	9,063	22,341	9,493	3,110	9,738
1962	33,357	17,262	16,095	58,186	34,632	10,810	14,159	9,662	23,554	9,813	3,296	10,444
1963	35,058	18,280	16,778	60,046	35,866	11,068	14,871	9,925	24,180	9,978	3,406	10,796
1964	37,331	19,637	17,694	63,409	38,506	11,970	16,191	10,344	24,903	10,131	3,511	11,261
1965	40,995	22,221	18,774	68,185	42,257	13,325	18,075	10,854	25,928	10,448	3,806	11,674
1966	44,870	24,649	20,220	77,952	49,920	15,489	21,939	12,491	28,032	11,155	4,204	12,673
1967	46,487	25,267	21,220	84,666	55,005	16,455	25,005	13,547	29,659	11,715	4,421	13,523
1968	50,228	27,659	22,570	90,618	58,875	17,376	27,336	14,163	31,743	12,289	4,848	14,606
1969	53,501	29,437	24,064	98,203	64,739	18,693	30,408	15,639	33,463	12,724	5,122	15,617
1970	52,805	28,188	24,617	101,653	66,780	19,182	29,848	17,751	34,871	13,150	5,274	16,448
1971	55,906	29,954	25,952	102,656	66,289	19,759	28,650	17,880	36,368	13,683	5,665	17,019
1972	63,027	34,027	29,000	108,237	70,250	20,860	30,788	18,601	37,988	14,676	5,982	17,330
1973	72,931	39,681	33,250	124,626	81,398	26,028	35,545	19,823	43,230	18,132	6,707	18,391
1974	84,790	44,230	40,560	157,792	101,739	35,151	42,603	23,985	56,053	23,699	8,175	24,179
1975	86,589	43,659	42,931	159,934	102,874	33,920	43,369	25,586	57,060	23,542	8,837	24,681
1976	98,797	50,700	48,097	175,193	112,581	37,548	46,345	28,690	62,612	25,833	9,933	26,846
1977	113,202	59,267	53,935	189,214	121,601	40,251	50,620	30,730	67,613	27,398	11,003	29,212
1978	126,905	67,848	59,057	210,509	137,891	45,252	58,634	34,005	72,618	29,317	11,907	31,394
1979	143,936	76,060	67,876	241,100	160,533	52,687	69,254	38,592	80,567	32,451	13,741	34,375
1980	154,391	77,550	76,841	264,281	174,620	55,121	76,997	42,502	89,661	36,206	15,732	37,723
1981	168,129	83,872	84,257	282,645	186,347	57,927	81,105	47,315	96,298	37,758	16,074	42,466
1982	159,027	76,693	82,334	264,909	175,103	52,454	77,813	44,836	89,806	35,165	14,308	40,333
1983	170,441	84,951	85,491	260,682	171,629	51,604	77,463	42,562	89,053	36,170	14,480	38,403
1984	189,578	98,502	91,076	285,709	191,109	56,469	88,105	46,535	94,600	36,635	14,811	43,154
1984: Jan	184,558	95,168	89,390	261,494	171,910	51,881	77,317	42,712	89,584	36,435	14,700	38,449
Feb	185,616	96,352	89,264	264,315	173,595	52,248	78,456	42,891	90,720	36,890	14,816	39,014
Mar	187,940	96,313	91,627	268,234	176,475	53,014	80,349	43,112	91,759	36,895	14,835	40,029
Apr	187,669	95,460	92,209	270,640	178,381	53,215	81,536	43,630	92,259	36,868	14,877	40,514
May	188,397	96,895	91,502	274,268	180,543	53,950	82,730	43,863	93,725	37,447	15,027	41,251
June	189,255	97,732	91,523	277,207	182,474	54,470	83,817	44,187	94,733	37,387	15,152	42,194
July	189,896	97,841	92,055	279,774	184,588	55,491	84,797	44,300	95,186	37,595	14,943	42,648
Aug	191,155	100,254	90,901	282,774	187,035	56,155	86,170	44,710	95,739	37,513	15,135	43,091
Sept	189,330	98,214	91,116	284,531	188,619	56,592	86,886	45,141	95,912	37,534	14,968	43,410
Oct	191,275	100,807	90,468	285,597	190,088	56,619	87,685	45,784	95,509	37,387	15,014	43,108
Nov	193,043	102,394	90,649	285,668	190,669	56,101	88,290	46,278	94,999	37,197	14,810	42,992
Dec	196,181	103,939	92,242	285,709	191,109	56,469	88,105	46,535	94,600	36,635	14,811	43,154
1985: Jan	191,724	101,966	89,758	285,785	192,153	56,033	88,672	47,448	93,632	36,731	14,656	42,245
Feb	192,261	101,724	90,537	286,146	192,030	55,768	88,967	47,295	94,116	36,914	14,642	42,560
Mar	194,303	102,116	92,187	286,171	192,355	55,445	89,684	47,226	93,816	36,400	14,524	42,892
Apr	193,509	102,068	91,441	286,049	192,475	55,638	89,537	47,300	93,574	36,399	14,351	42,824
May	194,638	102,718	91,920	284,900	191,546	54,693	89,654	47,199	93,354	36,107	14,318	42,929
June	193,871	102,657	91,214	285,678	192,239	54,714	90,306	47,219	93,439	36,448	14,336	42,655
July	193,793	102,478	91,315	285,036	192,163	54,257	91,383	46,523	92,873	35,917	14,216	42,740
Aug	196,593	105,311	91,282	284,688	192,037	54,217	91,473	46,347	92,651	35,974	14,161	42,516
Sept	194,229	103,656	90,573	284,030	191,930	53,844	92,181	45,905	92,100	35,433	14,310	42,357
Oct	197,229	106,479	90,750	282,444	190,508	53,644	91,072	45,792	91,936	35,539	14,607	41,790
Nov	200,131	107,007	93,124	281,993	190,284	52,999	91,020	46,265	91,709	35,051	14,680	41,978

[1] Monthly average for year and total for month.

[2] Book value, seasonally adjusted, end of period.

Note.—Data beginning 1958 are not strictly comparable with earlier data.

Source: Department of Commerce, Bureau of the Census.

TABLE B–54.—*Manufacturers' new and unfilled orders, 1947–85*

[Amounts in millions of dollars; monthly data seasonally adjusted]

Year or month	New orders[1]				Unfilled orders[2]			Unfilled orders—shipments ratio[3]		
	Total	Durable goods industries		Nondurable goods industries	Total	Durable goods industries	Nondurable goods industries	Total	Durable goods industries	Nondurable goods industries
		Total	Capital goods industries, nondefense							
1947	15,256	6,388	…	8,868	34,473	28,579	5,894	…	…	…
1948	17,693	8,126	…	9,566	30,736	26,619	4,117	…	…	…
1949	15,614	6,633	…	8,981	24,045	19,622	4,423	…	…	…
1950	20,110	10,165	…	9,945	41,456	35,435	6,021	…	…	…
1951	23,907	12,841	…	11,066	67,266	63,394	3,872	…	…	…
1952	23,204	12,061	…	11,143	75,857	72,680	3,177	…	…	…
1953	23,586	12,147	…	11,439	61,178	58,637	2,541	…	…	…
1954	22,335	10,768	…	11,566	48,266	45,250	3,016	3.42	4.12	0.96
1955	27,465	14,996	…	12,469	60,004	56,241	3,763	3.63	4.27	1.12
1956	28,368	15,365	…	13,003	67,375	63,880	3,495	3.87	4.55	1.04
1957	27,559	14,111	…	13,448	53,183	50,352	2,831	3.35	4.00	.85
1958	27,002	13,290	…	13,712	47,370	44,559	2,811	3.09	3.69	.86
1959	30,724	16,003	…	14,720	52,732	49,373	3,359	3.01	3.54	.94
1960	30,235	15,303	…	14,932	45,080	42,514	2,566	2.78	3.37	.72
1961	31,104	15,759	…	15,345	47,407	44,375	3,032	2.63	3.13	.79
1962	33,436	17,374	…	16,061	48,577	45,965	2,612	2.69	3.24	.68
1963	35,524	18,709	…	16,815	54,327	51,270	3,057	2.80	3.37	.73
1964	38,357	20,652	…	17,705	66,882	63,691	3,191	3.10	3.72	.72
1965	42,100	23,278	…	18,823	80,071	76,298	3,773	3.33	3.95	.80
1966	46,402	26,177	…	20,225	98,401	94,575	3,826	3.81	4.55	.76
1967	47,056	25,825	…	21,231	104,547	100,576	3,971	3.70	4.40	.73
1968	50,687	28,116	6,903	22,571	109,926	105,950	3,976	3.85	4.65	.69
1969	53,950	29,871	7,660	24,079	115,422	111,250	4,172	3.75	4.50	.69
1970	52,038	27,388	6,738	24,650	106,158	101,566	4,592	3.65	4.39	.77
1971	55,983	29,998	7,444	25,986	107,147	102,119	5,027	3.38	4.06	.77
1972	64,167	35,064	8,622	29,104	121,061	114,725	6,336	3.31	3.90	.88
1973	76,056	42,726	10,971	33,330	158,884	151,504	7,380	3.86	4.56	.93
1974	87,244	46,835	12,673	40,409	188,467	182,925	5,542	4.13	4.96	.64
1975	85,220	42,099	11,011	43,122	172,037	164,139	7,898	3.76	4.52	.84
1976	99,532	51,403	12,791	48,129	180,562	172,273	8,288	3.30	3.94	.76
1977	115,032	61,082	15,291	53,950	203,475	195,008	8,467	3.27	3.89	.70
1978	131,546	72,339	19,458	59,207	259,770	249,483	10,287	3.59	4.22	.78
1979	147,403	79,451	23,231	67,953	302,145	290,921	11,224	3.88	4.61	.76
1980	156,161	79,350	23,259	76,801	323,393	312,648	10,745	3.81	4.55	.67
1981	167,752	83,553	24,050	84,199	319,094	309,066	10,028	3.77	4.57	.59
1982	157,255	74,996	20,681	82,260	296,918	287,796	9,122	3.76	4.65	.53
1983	173,259	87,631	22,764	85,627	330,924	320,123	10,801	3.38	4.10	.55
1984	191,634	100,611	27,017	91,024	355,640	345,443	10,197	3.36	4.06	.49
1984: Jan	189,061	99,548	25,718	89,513	335,427	324,503	10,924	3.48	4.24	.55
Feb	191,409	101,794	27,020	89,615	341,220	329,945	11,275	3.51	4.27	.57
Mar	195,792	104,454	26,760	91,338	349,072	338,086	10,986	3.57	4.35	.55
Apr	189,360	97,307	26,332	92,053	350,763	339,933	10,830	3.59	4.39	.54
May	192,384	100,950	28,562	91,434	354,750	343,988	10,762	3.57	4.37	.53
June	189,911	98,340	27,721	91,571	355,406	344,596	10,810	3.53	4.31	.52
July	194,061	101,979	28,140	92,082	359,571	348,734	10,837	3.58	4.36	.52
Aug	192,384	101,860	26,736	90,524	360,800	350,340	10,460	3.55	4.32	.51
Sept	189,217	98,210	27,394	91,007	360,687	350,336	10,351	3.55	4.32	.50
Oct	186,799	96,506	25,259	90,293	356,211	346,035	10,176	3.46	4.20	.49
Nov	194,982	104,434	26,836	90,548	358,150	348,075	10,075	3.45	4.18	.49
Dec	193,671	101,307	26,893	92,364	355,640	345,443	10,197	3.36	4.06	.49
1985: Jan	195,210	105,447	23,633	89,763	359,125	348,924	10,201	3.47	4.23	.49
Feb	193,057	102,467	29,493	90,590	359,926	349,671	10,255	3.47	4.21	.50
Mar	191,532	99,544	27,206	91,988	357,151	347,096	10,055	3.40	4.14	.48
Apr	191,081	99,839	25,461	91,242	354,731	344,874	9,857	3.40	4.12	.48
May	195,019	102,971	25,594	92,048	355,112	345,127	9,985	3.38	4.12	.47
June	198,261	106,780	27,984	91,481	359,502	349,250	10,252	3.39	4.11	.48
July	195,793	104,370	26,685	91,423	361,502	351,142	10,360	3.41	4.14	.49
Aug	198,782	107,661	27,554	91,121	363,691	353,492	10,199	3.41	4.11	.49
Sept	197,332	106,641	29,240	90,691	366,794	356,477	10,317	3.47	4.22	.48
Oct	195,381	104,495	27,092	90,886	364,946	354,493	10,453	3.37	4.06	.50
Nov	196,865	103,796	25,788	93,069	361,680	351,282	10,398	3.32	4.00	.49

[1] Monthly average for year and total for month.

[2] Seasonally adjusted, end of period.

[3] Ratio of unfilled orders at end of period to shipments for period; excludes industries with no unfilled orders. Annual figures relate to seasonally adjusted data for December.

Note.—Data beginning 1958 are not strictly comparable with earlier data.

Source: Department of Commerce, Bureau of the Census.

TABLE B–55.—*Consumer price indexes, major expenditure classes, 1946–85*

[1967 = 100]

Year or month	All items	Food and beverages		Housing				Apparel and upkeep	Transportation	Medical care	Entertainment	Other goods and services	Energy[3]
		Total[1]	Food	Total[2]	Shelter	Fuel and other utilities[3]	Household furnishings and operation[2]						
1946	58.5	...	58.1	60.6	...	...	...	67.5	50.3	44.4	...	...	...
1947	66.9	...	70.6	65.2	...	...	...	78.2	55.5	48.1	...	...	...
1948	72.1	...	76.6	69.8	...	...	...	83.3	61.8	51.1	...	...	...
1949	71.4	...	73.5	70.9	...	...	...	80.1	66.4	52.7	...	...	...
1950	72.1	...	74.5	72.8	...	...	...	79.0	68.2	53.7	...	...	...
1951	77.8	...	82.8	77.2	...	...	...	86.1	72.5	56.3	...	...	...
1952	79.5	...	84.3	78.7	...	...	...	85.3	77.3	59.3	...	...	...
1953	80.1	...	83.0	80.8	76.5	83.0	91.3	84.6	79.5	61.4	...	...	...
1954	80.5	...	82.8	81.7	78.2	83.5	90.9	84.5	78.3	63.4	...	...	...
1955	80.2	...	81.6	82.3	79.1	85.1	89.9	84.1	77.4	64.8	...	...	...
1956	81.4	...	82.2	83.6	80.4	87.3	89.9	85.8	78.8	67.2	...	...	...
1957	84.3	...	84.9	86.2	83.4	89.9	91.9	87.3	83.3	69.9	...	...	90.1
1958	86.6	...	88.5	87.7	85.1	91.7	92.3	87.5	86.0	73.2	...	...	90.3
1959	87.3	...	87.1	88.6	86.0	93.8	93.1	88.2	89.6	76.4	...	...	91.8
1960	88.7	...	88.0	90.2	87.8	95.9	93.8	89.6	89.6	79.1	...	...	94.2
1961	89.6	...	89.1	90.9	88.5	97.1	93.7	90.4	90.6	81.4	...	...	94.4
1962	90.6	...	89.9	91.7	89.6	97.3	93.8	90.9	92.5	83.5	...	...	94.7
1963	91.7	...	91.2	92.7	90.7	98.2	94.6	91.9	93.0	85.6	...	...	95.0
1964	92.9	...	92.4	93.8	92.2	98.4	95.0	92.7	94.3	87.3	...	...	94.6
1965	94.5	...	94.4	94.9	93.8	98.3	95.3	93.7	95.9	89.5	...	...	96.3
1966	97.2	...	99.1	97.2	96.8	98.8	97.0	96.1	97.2	93.4	...	...	97.8
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	104.2	103.6	103.6	104.0	104.8	101.3	103.8	105.4	103.2	106.1	105.7	105.2	101.5
1969	109.8	108.8	108.9	110.4	113.3	103.6	107.7	111.5	107.2	113.4	111.0	110.4	104.2
1970	116.3	114.7	114.9	118.2	123.6	107.6	111.5	116.1	112.7	120.6	116.7	116.8	107.0
1971	121.3	118.3	118.4	123.4	128.8	115.0	115.7	119.8	118.6	128.4	122.9	122.4	111.2
1972	125.3	123.2	123.5	128.1	134.5	120.1	118.3	122.3	119.9	132.5	126.5	127.5	114.3
1973	133.1	139.5	141.4	133.7	140.7	126.9	121.6	126.8	123.8	137.7	130.0	132.5	123.5
1974	147.7	158.7	161.7	148.8	154.4	150.2	135.3	136.2	137.7	150.5	139.8	142.0	159.7
1975	161.2	172.1	175.4	164.5	169.7	167.8	151.0	142.3	150.6	168.6	152.2	153.9	176.6
1976	170.5	177.4	180.8	174.6	179.0	182.7	160.1	147.6	165.5	184.7	159.8	162.7	189.3
1977	181.5	188.0	192.2	186.5	191.1	202.2	167.5	154.2	177.2	202.4	167.7	172.2	207.3
1978	195.4	206.3	211.4	202.8	210.4	216.0	177.7	159.6	185.5	219.4	176.6	183.3	220.4
1979	217.4	228.5	234.5	227.6	239.7	239.3	190.3	166.6	212.0	239.7	188.5	196.7	275.9
1980	246.8	248.0	254.6	263.3	281.7	278.6	205.4	178.4	249.7	265.9	205.3	214.5	361.1
1981	272.4	267.3	274.6	293.5	314.7	319.2	221.3	186.9	280.0	294.5	221.4	235.7	410.0
1982	289.1	278.2	285.7	314.7	337.0	350.8	233.2	191.8	291.5	328.7	235.8	259.9	416.1
1983	298.4	284.4	291.7	323.1	344.8	370.3	238.5	196.5	298.4	357.3	246.0	288.3	419.3
1984	311.1	295.1	302.9	336.5	361.7	387.3	242.5	200.2	311.7	379.5	255.1	307.7	423.6
1985	322.2	302.0	309.8	349.9	382.0	393.6	247.2	206.0	319.9	403.1	265.0	326.6	426.5
1984: Jan	305.2	291.6	299.4	329.2	353.2	376.0	240.4	196.4	306.0	369.5	249.9	300.5	416.7
Feb	306.6	294.2	302.1	331.0	354.0	383.0	240.4	196.2	305.8	373.2	251.5	301.5	420.2
Mar	307.3	294.3	302.2	331.5	355.5	380.1	241.2	198.8	306.9	374.5	251.7	302.1	418.1
Apr	308.8	294.5	302.3	333.2	357.8	380.9	242.3	199.2	309.6	375.7	253.8	302.8	421.3
May	309.7	293.6	301.4	334.6	358.9	385.5	242.4	198.9	312.2	376.8	253.5	303.2	426.1
June	310.7	294.3	302.0	336.2	360.2	390.0	242.3	197.4	313.1	378.0	254.5	304.4	428.5
July	311.7	295.3	303.2	338.1	362.7	393.9	241.9	196.6	312.9	380.3	255.3	306.5	428.3
Aug	313.0	296.9	304.8	339.5	364.6	395.5	242.2	200.1	312.9	381.9	256.4	307.2	427.3
Sept	314.5	296.4	304.2	341.4	366.5	397.0	244.1	204.2	313.7	383.1	257.3	314.6	429.0
Oct	315.3	296.6	304.4	341.2	367.8	392.4	244.3	205.7	315.5	385.5	258.3	315.8	426.7
Nov	315.3	296.3	304.1	340.9	368.9	387.5	244.2	205.2	316.1	387.5	259.0	316.5	421.8
Dec	315.5	297.2	305.1	341.2	370.1	386.0	244.2	203.2	315.8	388.5	260.1	316.7	418.9
1985: Jan	316.1	299.3	307.3	342.0	371.2	387.2	244.2	199.8	314.7	391.1	261.0	319.1	414.5
Feb	317.4	301.4	309.5	343.6	373.3	386.5	246.2	201.8	314.3	393.8	261.3	320.5	411.4
Mar	318.8	301.6	309.7	344.7	374.3	388.2	246.9	205.3	316.7	396.5	262.2	321.1	416.6
Apr	320.1	301.6	309.6	345.9	375.9	388.7	247.9	205.9	320.0	398.0	263.3	321.8	424.4
May	321.3	301.0	308.9	348.5	379.5	393.0	247.6	205.3	321.4	399.5	263.6	322.3	431.7
June	322.3	301.4	309.3	350.4	381.0	399.4	247.1	204.6	321.8	401.7	264.8	323.0	436.8
July	322.8	301.6	309.5	351.6	383.2	399.9	246.5	202.8	321.8	404.0	265.7	325.0	437.1
Aug	323.5	301.8	309.7	352.9	385.9	398.9	247.0	205.3	320.7	406.6	265.7	326.0	433.8
Sept	324.5	302.1	309.9	353.8	386.9	400.5	247.1	209.6	319.7	408.3	266.8	333.3	432.6
Oct	325.5	302.5	309.8	354.4	389.1	395.6	248.4	211.1	320.9	410.5	268.4	334.9	427.1
Nov	326.6	303.6	311.0	355.0	391.3	392.1	248.9	211.2	323.2	413.0	269.0	335.3	425.1
Dec	327.4	305.6	313.2	355.8	392.3	393.3	248.8	209.0	324.0	414.7	268.3	336.5	426.5

[1] Includes alcoholic beverages, not shown separately.

[2] Series beginning 1967 not comparable with series for earlier years.

[3] See Tables B–56 and B–57.

Note.—Data beginning 1978 are for all urban consumers; earlier data are for urban wage earners and clerical workers.

Data beginning 1983 incorporate a rental equivalence measure for homeowners' costs and therefore are not strictly comparable with earlier figures. See *Economic Report of the President,* February 1983 for homeownership costs as measured prior to 1983.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B–56.—*Consumer price indexes, selected expenditure classes, 1946–85*

[1967 = 100]

Year or month	Food and beverages				Shelter					Fuel and other utilities				
	Total [1]	Food			Total	Renters' costs		Homeowners' costs	Maintenance and repairs	Total	Household fuels			Other utilities and public services
		Total	At home	Away from home		Total	Rent, residential				Total	Fuel oil, coal, and bottled gas	Gas (piped) and electricity	
1946	......	58.1	......	......	......	......	59.2	......	......	......	......	51.3	77.4	......
1947	......	70.6	73.5	......	......	......	61.1	......	......	......	......	58.4	77.1	......
1948	......	76.6	79.8	......	......	......	65.1	......	......	......	......	68.6	79.1	......
1949	......	73.5	76.7	......	......	......	68.0	......	......	......	......	70.3	81.0	......
1950	......	74.5	77.6	......	......	......	70.4	......	......	......	......	72.7	81.2	......
1951	......	82.8	86.3	......	......	......	73.2	......	......	......	......	76.5	81.5	......
1952	......	84.3	87.8	......	......	......	76.2	......	......	......	......	78.0	82.6	......
1953	......	83.0	86.2	68.9	76.5	......	80.3	......	71.2	83.0	......	81.5	84.2	......
1954	......	82.8	85.8	70.1	78.2	......	83.2	......	72.4	83.5	......	81.2	85.3	......
1955	......	81.6	84.1	70.8	79.1	......	84.3	......	74.1	85.1	......	82.3	87.5	......
1956	......	82.2	84.4	72.2	80.4	......	85.9	......	77.2	87.3	......	85.9	88.4	......
1957	......	84.9	87.2	74.9	83.4	......	87.5	......	80.5	89.9	......	90.3	89.3	......
1958	......	88.5	91.0	77.2	85.1	......	89.1	......	81.8	91.7	......	88.7	92.4	......
1959	......	87.1	88.8	79.3	86.0	......	90.4	......	83.2	93.8	......	89.8	94.7	......
1960	......	88.0	89.6	81.4	87.8	......	91.7	......	84.6	95.9	......	89.2	98.6	......
1961	......	89.1	90.4	83.2	88.5	......	92.9	......	85.9	97.1	......	91.0	99.4	......
1962	......	89.9	91.0	85.4	89.6	......	94.0	......	86.5	97.3	......	91.5	99.4	......
1963	......	91.2	92.2	87.3	90.7	......	95.0	......	87.7	98.2	......	93.2	99.4	......
1964	......	92.4	93.2	88.9	92.2	......	95.9	......	89.5	98.4	......	92.7	99.4	......
1965	......	94.4	95.5	90.9	93.8	......	96.9	......	91.3	98.3	......	94.6	99.4	......
1966	......	99.1	100.3	95.1	96.8	......	98.2	......	95.2	98.8	......	97.0	99.6	......
1967	100.0	100.0	100.0	100.0	100.0	......	100.0	......	100.0	100.0	100.0	100.0	100.0	100.0
1968	103.6	103.6	103.2	105.2	104.8	......	102.4	......	106.1	101.3	101.4	103.1	100.9	101.2
1969	108.8	108.9	108.2	111.6	113.3	......	105.7	......	115.0	103.6	103.4	105.6	102.8	104.0
1970	114.7	114.9	113.7	119.9	123.6	......	110.1	......	124.0	107.6	107.9	110.1	107.3	107.4
1971	118.3	118.4	116.4	126.1	128.8	......	115.2	......	133.7	115.0	115.3	117.5	114.7	114.7
1972	123.2	123.5	121.6	131.1	134.5	......	119.2	......	140.7	120.1	120.1	118.5	120.5	120.6
1973	139.5	141.4	141.4	141.4	140.7	......	124.3	......	151.0	126.9	128.4	136.0	126.4	124.1
1974	158.7	161.7	162.4	159.4	154.4	......	130.6	......	171.6	150.2	160.7	214.6	145.8	130.3
1975	172.1	175.4	175.8	174.3	169.7	......	137.3	......	187.6	167.8	183.8	235.3	169.6	137.1
1976	177.4	180.8	179.5	186.1	179.0	......	144.7	......	199.6	182.7	202.3	250.8	189.0	145.4
1977	188.0	192.2	190.2	200.3	191.1	......	153.5	......	214.7	202.2	228.6	283.4	213.4	152.0
1978	206.3	211.4	210.2	218.4	210.4	......	164.0	......	233.0	216.0	247.4	298.3	232.6	158.3
1979	228.5	234.5	232.9	242.9	239.7	......	176.0	......	256.4	239.3	286.4	403.1	257.8	159.5
1980	248.0	254.6	251.5	267.0	281.7	......	191.6	......	285.7	278.6	349.4	556.0	301.8	165.2
1981	267.3	274.6	269.9	291.0	314.7	......	208.2	......	314.4	319.2	407.0	675.9	345.9	181.0
1982	278.2	285.7	279.2	306.5	337.0	......	224.0	......	334.1	350.8	446.2	667.9	393.8	200.2
1983	284.4	291.7	282.2	319.9	344.8	103.0	236.9	102.5	346.3	370.3	469.2	628.0	428.7	213.7
1984	295.1	302.9	292.6	333.4	361.7	108.6	249.3	107.3	359.2	387.3	485.5	641.8	445.2	230.2
1985	302.0	309.8	296.8	346.6	382.0	115.4	264.6	113.1	368.9	293.6	488.1	619.5	452.7	240.7
1984: Jan	291.6	299.4	290.2	327.2	353.2	105.7	242.9	104.9	356.7	376.0	470.4	642.8	427.3	224.6
Feb	294.2	302.1	293.6	328.5	354.0	106.0	243.6	105.1	353.5	383.0	479.6	688.6	429.0	228.0
Mar	294.3	302.2	293.1	329.8	355.5	106.5	244.8	105.6	355.3	380.1	475.2	660.0	429.5	227.4
Apr	294.5	302.3	292.8	330.9	357.8	107.4	246.4	106.2	356.3	380.9	476.0	650.7	432.3	228.2
May	293.6	301.4	290.7	332.6	358.9	107.8	247.2	106.5	357.3	385.5	483.5	649.2	441.4	228.8
June	294.3	302.0	291.4	333.1	360.2	108.2	248.4	106.8	358.9	390.0	490.7	646.0	450.6	229.4
July	295.3	303.2	292.5	334.4	362.7	108.9	249.7	107.6	360.3	393.9	496.5	637.4	459.1	230.6
Aug	296.9	304.8	294.4	335.5	364.6	109.6	251.1	108.1	360.1	395.5	498.6	625.5	463.9	231.3
Sept	296.4	304.2	293.4	335.8	366.5	110.2	252.4	108.7	362.7	397.0	500.1	622.1	466.4	232.7
Oct	296.6	304.4	293.4	336.6	367.8	110.7	253.8	109.1	361.6	392.4	492.1	626.8	456.0	232.9
Nov	296.3	304.1	292.4	337.7	368.9	110.9	254.8	109.4	362.9	387.5	482.6	626.9	444.7	234.4
Dec	297.2	305.1	293.2	339.2	370.1	111.3	256.1	109.8	364.4	386.0	480.2	625.9	442.2	234.1
1985: Jan	299.3	307.3	296.1	339.9	371.2	111.8	257.1	110.0	366.0	387.2	481.2	621.6	444.1	235.3
Feb	301.4	309.5	298.6	341.4	373.3	112.4	258.4	110.7	366.8	386.5	480.8	623.4	443.3	234.3
Mar	301.6	309.7	298.4	342.6	374.3	112.9	259.2	110.8	370.0	388.2	482.2	620.8	445.5	236.3
Apr	301.6	309.6	297.7	343.9	375.9	113.5	260.4	111.3	368.0	388.7	483.0	623.5	445.9	236.4
May	301.0	308.9	296.2	345.1	379.5	114.5	262.6	112.4	366.2	393.0	490.0	620.8	454.7	236.8
June	301.4	309.3	296.0	346.9	381.0	115.1	263.6	112.8	367.6	399.4	497.7	612.0	465.6	241.1
July	301.6	309.5	296.2	347.3	383.2	115.8	265.0	113.5	367.8	399.9	497.3	601.9	467.1	242.8
Aug	301.8	309.7	295.9	348.4	385.9	116.6	266.6	114.3	370.6	398.9	494.4	594.6	465.1	244.2
Sept	302.1	309.9	295.6	349.9	386.9	117.0	267.7	114.6	368.7	400.5	496.8	601.7	466.5	244.6
Oct	302.5	309.8	295.3	350.3	389.1	117.9	269.9	115.1	368.5	395.6	488.4	615.3	453.9	244.7
Nov	303.6	311.0	296.6	351.3	391.3	118.4	271.7	115.8	372.7	392.1	481.5	641.6	440.5	245.9
Dec	305.6	313.2	299.3	352.1	392.3	118.3	272.4	116.3	373.7	393.3	483.6	657.3	439.9	245.8

See next page for continuation of table.

TABLE B-56.—*Consumer price indexes, selected expenditure classes, 1946–85*—Continued

[1967 = 100]

Year or month	Transportation								Medical care		
	Total	Private transportation						Public transportation	Total	Medical care commodities	Medical care services
		Total [2]	New cars	Used cars	Motor fuel [3]	Automobile maintenance and repair	Other				
1946	50.3	54.3	......	......	54.9	52.0	......	34.4	44.4	76.2	40.1
1947	55.5	61.5	69.2	......	62.2	56.4	......	36.0	48.1	81.8	43.5
1948	61.8	68.2	75.6	......	70.4	59.6	......	40.7	51.1	86.1	46.4
1949	66.4	72.3	82.8	......	72.3	61.1	......	45.2	52.7	87.4	48.1
1950	68.2	72.5	83.4	......	71.8	62.3	......	48.9	53.7	88.5	49.2
1951	72.5	75.8	87.4	......	73.9	67.0	......	54.0	56.3	91.0	51.7
1952	77.3	80.8	94.9	......	75.8	68.6	......	57.5	59.3	91.8	55.0
1953	79.5	82.4	95.8	89.2	80.3	72.3	......	61.3	61.4	92.6	57.0
1954	78.3	80.3	94.3	75.9	82.5	74.8	......	65.5	63.4	93.7	58.7
1955	77.4	78.9	90.9	71.8	83.6	76.5	......	67.4	64.8	94.7	60.4
1956	78.8	80.1	93.5	69.1	86.5	79.5	......	70.0	67.2	96.7	62.8
1957	83.3	84.7	98.4	77.4	90.0	82.4	......	72.7	69.9	99.3	65.5
1958	86.0	87.4	101.5	80.2	88.8	83.7	......	76.1	73.2	102.8	68.7
1959	89.6	91.1	105.9	89.5	89.9	85.5	......	78.3	76.4	104.4	72.0
1960	89.6	90.6	104.5	83.6	92.5	87.2	......	81.0	79.1	104.5	74.9
1961	90.6	91.3	104.5	86.9	91.4	89.3	......	84.6	81.4	103.3	77.7
1962	92.5	93.0	104.1	94.8	91.9	90.4	......	87.4	83.5	101.7	80.2
1963	93.0	93.4	103.5	96.0	91.8	91.6	......	88.5	85.6	100.8	82.6
1964	94.3	94.7	103.2	100.1	91.4	92.8	......	90.1	87.3	100.5	84.6
1965	95.9	96.3	100.9	99.4	94.9	94.5	......	91.9	89.5	100.2	87.3
1966	97.2	97.5	99.1	97.0	97.0	96.2	......	95.2	93.4	100.5	92.0
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	103.2	103.0	102.8	(4)	101.4	105.5	103.4	104.6	106.1	100.2	107.3
1969	107.2	106.5	104.4	103.1	104.7	112.2	109.7	112.7	113.4	101.3	116.0
1970	112.7	111.1	107.6	104.3	105.6	120.6	119.2	128.5	120.6	103.6	124.2
1971	118.6	116.6	112.0	110.2	106.3	129.2	128.4	137.7	128.4	105.4	133.3
1972	119.9	117.5	111.0	110.5	107.6	135.1	129.1	143.4	132.5	105.6	138.2
1973	123.8	121.5	111.1	117.6	118.1	142.2	127.8	144.8	137.7	105.9	144.3
1974	137.7	136.6	117.5	122.6	159.9	156.8	132.4	148.0	150.5	109.6	159.1
1975	150.6	149.8	127.6	146.4	170.8	176.6	141.2	158.6	168.6	118.8	179.1
1976	165.5	164.6	135.7	167.9	177.9	189.7	163.1	174.2	184.7	126.0	197.1
1977	177.2	176.6	142.9	182.8	188.2	203.7	177.3	182.4	202.4	134.1	216.7
1978	185.5	185.0	153.8	186.5	196.3	220.6	184.6	187.8	219.4	143.5	235.4
1979	212.0	212.3	166.0	201.0	265.6	242.6	198.6	200.3	239.7	153.8	258.3
1980	249.7	249.2	179.3	208.1	369.1	268.3	222.6	251.6	265.9	168.1	287.4
1981	280.0	277.5	190.2	256.9	410.9	293.6	241.3	312.0	294.5	186.5	318.2
1982	291.5	287.5	197.6	296.4	389.4	315.8	257.8	346.0	328.7	205.7	356.0
1983	298.4	293.9	202.6	329.7	376.4	330.0	260.8	362.6	357.3	223.3	387.0
1984	311.7	306.6	208.5	375.7	370.7	341.5	273.3	385.2	379.5	239.7	410.3
1985	319.9	314.2	215.2	379.7	373.8	351.4	287.6	402.8	403.1	256.7	435.1
1984: Jan	306.0	300.9	207.2	357.3	370.6	336.1	267.6	378.2	369.5	231.2	400.2
Feb	305.8	300.8	207.2	357.2	369.4	337.4	267.7	377.4	373.2	232.9	404.4
Mar	306.9	301.9	207.2	362.2	369.1	338.3	268.3	377.4	374.5	235.0	405.3
Apr	309.6	304.8	207.4	370.0	374.3	338.9	269.0	378.0	375.7	236.9	406.3
May	312.2	307.4	207.6	378.0	376.9	340.2	270.4	380.7	376.8	238.7	407.1
June	313.1	308.1	207.7	382.0	375.2	340.7	271.5	385.2	378.0	239.4	408.4
July	312.9	307.5	208.1	383.2	370.2	341.6	272.4	389.3	380.3	240.7	410.9
Aug	312.9	307.5	208.1	383.8	366.6	342.7	274.9	390.8	381.9	241.6	412.7
Sept	313.7	308.4	208.2	384.2	368.5	344.2	275.9	389.5	383.1	242.4	413.9
Oct	315.5	310.2	209.6	384.6	370.9	345.3	278.7	391.1	385.5	244.1	416.5
Nov	316.1	310.8	211.4	383.6	369.8	345.8	280.7	391.8	387.5	245.6	418.5
Dec	315.8	310.4	212.0	382.7	366.4	346.2	282.3	392.8	388.5	247.3	419.3
1985: Jan	314.7	309.1	213.1	382.8	357.6	346.9	283.9	394.5	391.1	248.2	422.4
Feb	314.3	308.7	213.9	384.6	352.4	348.2	284.4	394.4	393.8	249.8	425.3
Mar	316.7	311.0	214.1	386.1	360.6	348.5	284.5	397.3	396.5	251.9	428.1
Apr	320.0	314.6	214.1	386.4	374.2	348.2	285.8	398.0	398.0	253.9	429.4
May	321.4	316.0	214.5	384.2	381.6	349.6	285.6	398.4	399.5	255.2	430.9
June	321.8	316.3	214.7	380.3	384.7	350.4	286.6	399.3	401.7	257.0	433.0
July	321.8	316.1	214.7	376.7	385.5	351.1	287.6	402.4	404.0	257.8	435.8
Aug	320.7	314.9	214.6	374.0	381.9	351.9	287.7	403.7	406.6	259.3	438.6
Sept	319.7	313.6	214.5	374.3	377.7	353.5	285.8	408.0	408.3	260.2	440.5
Oct	320.9	314.7	216.2	375.3	374.6	355.7	289.6	411.5	410.5	261.3	443.0
Nov	323.2	317.0	218.4	376.4	376.7	355.8	293.9	412.8	413.0	262.7	445.8
Dec p	324.0	317.8	219.4	375.6	377.5	357.5	295.2	412.9	414.7	262.9	448.0

[1] Includes alcoholic beverages, not shown separately.
[2] Includes direct pricing of new trucks and motorcycles, beginning September 1982.
[3] Includes direct pricing of diesel fuel and gasohol beginning September 1981.
[4] Not available.

Note.—Data beginning 1978 are for all urban consumers; earlier data are for urban wage earners and clerical workers. See also Note, Table B-55.

Source: Department of Labor, Bureau of Labor Statistics.

Table B–57.—*Consumer price indexes, commodities, services, and special groups, 1940–85*

[1967 = 100]

Year or month	All items	Commodities					Services			Special indexes			
		All commodities	Food	Commodities less food			All services	Medical care services	Services less medical care	All items less food	All items less energy	All items less food and energy	Energy[1]
				All	Durable	Nondurable							
1940	42.0	40.6	35.2	48.0	48.1	44.7	43.6	32.5		47.3			
1941	44.1	43.3	38.4	50.4	51.4	46.7	44.2	32.7		48.7			
1942	48.8	49.6	45.1	56.0	58.4	51.6	45.6	33.7		52.1			
1943	51.8	54.0	50.3	58.4	60.3	53.8	46.4	35.4		53.0			
1944	52.7	54.7	49.6	61.6	65.9	56.6	47.5	36.9		55.7			
1945	53.9	56.3	50.7	64.1	70.9	58.6	48.2	37.9		56.9			
1946	58.5	62.4	58.1	68.1	74.1	62.9	49.1	40.1		59.4			
1947	66.9	75.0	70.6	76.8	80.3	72.2	51.1	43.5		64.9			
1948	72.1	80.4	76.6	82.7	86.2	77.8	54.3	46.4		69.6			
1949	71.4	78.3	73.5	81.5	87.4	76.3	56.9	48.1		70.3			
1950	72.1	78.8	74.5	81.4	88.4	76.2	58.7	49.2		71.1			
1951	77.8	85.9	82.8	87.5	95.1	82.0	61.8	51.7		75.7			
1952	79.5	87.0	84.3	88.3	96.4	82.4	64.5	55.0		77.5			
1953	80.1	86.7	83.0	88.5	95.7	83.1	67.3	57.0		79.0			
1954	80.5	85.9	82.8	87.5	93.3	83.5	69.5	58.7		79.5			
1955	80.2	85.1	81.6	86.9	91.5	83.5	70.9	60.4		79.7			
1956	81.4	85.9	82.2	87.8	91.5	85.3	72.7	62.8		81.1			
1957	84.3	88.6	84.9	90.5	94.4	87.6	75.6	65.5	77.6	83.8	83.9	83.3	90.1
1958	86.6	90.6	88.5	91.5	95.9	88.2	78.5	68.7	80.4	85.7	86.3	85.2	90.3
1959	87.3	90.7	87.1	92.7	97.3	89.3	80.8	72.0	82.5	87.3	87.0	87.0	91.8
1960	88.7	91.5	88.0	93.1	96.7	90.7	83.5	74.9	85.2	88.8	88.3	88.3	94.2
1961	89.6	92.0	89.1	93.4	96.6	91.2	85.2	77.7	86.7	89.7	89.3	89.3	94.4
1962	90.6	92.8	89.9	94.1	97.6	91.8	86.8	80.2	88.1	90.8	90.4	90.5	94.7
1963	91.7	93.6	91.2	94.8	97.9	92.7	88.5	82.6	89.6	92.0	91.6	91.6	95.0
1964	92.9	94.6	92.4	95.6	98.8	93.5	90.2	84.6	91.2	93.2	92.9	93.0	94.6
1965	94.5	95.7	94.4	96.2	98.4	94.8	92.2	87.3	93.2	94.5	94.3	94.3	96.3
1966	97.2	98.2	99.1	97.5	98.5	97.0	95.8	92.0	96.4	96.7	97.3	96.6	97.8
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	104.2	103.7	103.6	103.7	103.1	104.1	105.2	107.3	104.9	104.4	104.4	104.6	101.5
1969	109.8	108.4	108.9	108.1	107.0	108.8	112.5	116.0	112.0	110.1	110.3	110.7	104.2
1970	116.3	113.5	114.9	112.5	111.8	113.1	121.6	124.2	121.3	116.7	117.0	117.6	107.0
1971	121.3	117.4	118.4	116.8	116.5	117.0	128.4	133.3	127.7	122.1	122.0	123.1	111.2
1972	125.3	120.9	123.5	119.4	118.9	119.8	133.3	138.2	132.6	125.8	126.1	126.9	114.3
1973	133.1	129.9	141.4	123.5	121.9	124.8	139.1	144.3	138.3	130.7	133.8	131.3	123.5
1974	147.7	145.5	161.7	136.6	130.6	140.9	152.1	159.1	151.0	143.7	146.9	142.2	159.7
1975	161.2	158.4	175.4	149.1	145.5	151.7	166.6	179.1	164.7	157.1	160.2	155.3	176.6
1976	170.5	165.2	180.8	156.6	154.3	158.3	180.4	197.1	177.7	167.5	169.2	165.5	189.3
1977	181.5	174.7	192.2	165.1	163.2	166.5	194.3	216.7	190.6	178.4	179.8	175.8	207.3
1978	195.4	187.1	211.4	174.7	173.9	174.3	210.9	235.4	206.9	191.2	193.8	188.7	220.4
1979	217.4	208.4	234.5	195.1	191.1	198.7	234.2	258.3	230.1	213.0	213.1	207.0	275.9
1980	246.8	233.9	254.6	222.0	210.4	235.2	270.3	287.4	266.6	244.0	238.0	232.8	361.1
1981	272.4	253.6	274.6	241.2	227.1	257.5	305.7	318.2	302.2	270.6	261.7	257.1	410.0
1982	289.1	263.8	285.7	250.9	241.1	261.6	333.3	356.0	328.6	288.4	279.3	276.1	416.1
1983	298.4	271.5	291.7	259.0	253.0	266.3	344.9	387.0	338.1	298.3	289.3	287.0	419.3
1984	311.1	280.7	302.9	267.0	266.5	270.8	363.0	410.3	355.6	311.3	302.9	301.2	423.6
1985	322.2	286.7	309.8	272.5	270.7	277.2	381.5	435.1	373.3	323.3	314.8	314.4	426.5
1984: Jan	305.2	276.8	299.4	263.0	261.4	267.4	353.9	400.2	346.6	304.8	297.0	294.6	416.7
Feb	306.6	278.3	302.1	263.8	260.9	269.1	355.3	404.4	347.8	305.9	298.2	295.5	420.2
Mar	307.3	278.7	302.2	264.4	262.2	269.3	356.5	405.3	349.0	306.8	299.2	296.7	418.1
Apr	308.8	280.1	302.3	266.5	265.2	270.7	358.1	406.3	350.6	308.6	300.5	298.3	421.3
May	309.7	280.4	301.4	267.4	267.0	271.1	359.9	407.1	352.5	310.0	301.1	299.3	426.1
June	310.7	280.6	302.0	267.4	267.8	270.5	361.9	408.4	354.5	311.0	301.9	300.2	428.5
July	311.7	280.6	303.2	266.8	267.8	269.5	364.5	410.9	357.1	312.0	303.1	301.3	428.3
Aug	313.0	281.4	304.8	267.1	267.8	270.0	366.5	412.7	359.2	313.2	304.6	302.8	427.3
Sept	314.5	282.3	304.2	268.8	268.7	272.3	368.9	413.9	361.7	315.2	306.1	304.9	429.0
Oct	315.3	283.1	304.4	269.8	269.3	273.6	369.7	416.5	362.3	316.1	307.1	306.1	426.7
Nov	315.3	283.0	304.1	269.9	270.0	273.3	369.9	418.5	362.3	316.2	307.7	306.9	421.8
Dec	315.5	282.8	305.1	269.2	269.8	272.2	370.6	419.3	363.0	316.2	308.2	307.3	418.9
1985: Jan	316.1	282.7	307.3	267.8	270.2	269.7	372.1	422.4	364.3	316.3	309.2	307.9	414.5
Feb	317.4	284.0	309.5	268.6	271.4	270.2	373.5	425.3	365.5	317.4	310.9	309.5	411.4
Mar	318.8	285.3	309.7	270.6	271.9	273.2	375.0	428.1	366.9	319.1	312.0	310.8	416.6
Apr	320.1	286.8	309.6	272.8	272.6	276.5	376.2	429.4	368.1	320.8	312.7	311.8	424.4
May	321.3	287.0	308.9	273.4	271.6	278.0	378.9	430.9	370.9	322.4	313.3	312.8	431.7
June	322.3	286.9	309.3	273.1	270.4	278.4	381.3	433.0	373.3	323.6	313.9	313.4	436.8
July	322.8	286.5	309.5	272.4	269.3	277.9	383.3	435.8	375.2	324.2	314.5	314.1	437.1
Aug	323.5	286.5	309.7	272.3	268.6	278.1	384.9	438.6	376.7	325.0	315.6	315.3	433.8
Sept	324.5	287.1	309.9	273.1	268.7	279.6	386.5	440.5	378.3	326.2	316.8	316.9	432.6
Oct	325.5	287.9	309.8	274.4	270.2	280.7	387.7	443.0	379.3	327.4	318.4	318.9	427.1
Nov	326.6	289.2	311.0	275.7	271.5	282.0	388.7	445.8	380.1	328.5	319.8	320.4	425.1
Dec	327.4	289.9	313.2	275.7	271.4	282.0	389.5	448.0	380.8	328.9	320.5	320.7	426.5

[1] Fuel oil, coal, and bottled gas; gas (piped) and electricity; and motor fuel. Motor oil, coolant, etc. also included through 1982.

Note.—Data beginning 1978 are for all urban consumers; earlier data are for urban wage earners and clerical workers. See also Note, Table B–55.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-58.—*Changes in special consumer price indexes, 1958–85*

[Percent change]

Year or month	All items		All items less food		All items less energy		All items less food and energy		All items less food, energy, and shelter	
	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year
1958	1.8	2.7	1.6	2.3	1.9	2.9	1.8	2.3		
1959	1.5	.8	2.3	1.9	1.4	.8	2.2	2.1		
1960	1.5	1.6	1.0	1.7	1.4	1.5	.8	1.5		
1961	.7	1.0	1.1	1.0	.8	1.1	1.5	1.1		
1962	1.2	1.1	1.2	1.2	1.2	1.2	1.1	1.3		
1963	1.6	1.2	1.6	1.3	1.8	1.3	1.8	1.2		
1964	1.2	1.3	1.0	1.3	1.3	1.4	1.2	1.5		
1965	1.9	1.7	1.6	1.4	1.9	1.5	1.5	1.4		
1966	3.4	2.9	3.3	2.3	3.5	3.2	3.3	2.4		
1967	3.0	2.9	3.5	3.4	3.1	2.8	3.9	3.5		
1968	4.7	4.2	4.9	4.4	4.9	4.4	5.1	4.6	4.6	4.6
1969	6.1	5.4	5.7	5.5	6.4	5.7	6.1	5.8	5.0	4.8
1970	5.5	5.9	6.5	6.0	5.6	6.1	6.6	6.2	5.7	5.1
1971	3.4	4.3	3.1	4.6	3.3	4.3	3.1	4.7	3.2	4.9
1972	3.4	3.3	3.0	3.0	3.5	3.4	3.0	3.1	2.6	2.4
1973	8.8	6.2	5.6	3.9	8.3	6.1	4.7	3.5	3.5	3.0
1974	12.2	11.0	12.2	9.9	11.5	9.8	11.3	8.3	11.3	7.6
1975	7.0	9.1	7.1	9.3	6.7	9.1	6.7	9.2	6.4	8.9
1976	4.8	5.8	6.2	6.6	4.6	5.6	6.1	6.6	7.0	7.0
1977	6.8	6.5	6.3	6.5	6.8	6.3	6.4	6.2	5.2	6.0
1978	9.0	7.7	8.5	7.2	9.2	7.8	8.5	7.3	6.5	5.7
1979	13.3	11.3	14.0	11.4	11.1	10.0	11.3	9.7	7.2	6.9
1980	12.4	13.5	12.9	14.6	11.7	11.7	12.1	12.5	9.9	8.8
1981	8.9	10.4	9.9	10.9	8.6	10.0	9.6	10.4	9.4	9.5
1982	3.9	6.1	4.0	6.6	4.2	6.7	4.5	7.4	6.1	7.7
1983	3.8	3.2	4.1	3.4	4.4	3.6	4.9	3.9	5.0	5.2
1984	4.0	4.3	4.0	4.4	4.5	4.7	4.7	4.9	4.4	5.0
1985	3.8	3.6	4.0	3.9	4.0	3.9	4.4	4.4	3.7	3.8
	Change from preceding month									
	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted
1984: Jan	0.6	0.6	0.3	0.5	0.7	0.7	0.3	0.5	0.3	0.6
Feb	.5	.4	.4	.3	.4	.4	.3	.3	.3	.4
Mar	.2	.3	.3	.4	.3	.3	.4	.4	.5	.3
Apr	.5	.4	.6	.6	.4	.4	.5	.5	.5	.4
May	.3	.2	.5	.3	.2	.2	.3	.3	.3	.4
June	.3	.2	.3	.2	.3	.3	.3	.3	.3	.3
July	.3	.3	.3	.4	.4	.4	.4	.4	.3	.3
Aug	.4	.4	.4	.4	.5	.5	.5	.4	.5	.4
Sept	.5	.4	.6	.4	.5	.3	.7	.4	.7	.4
Oct	.3	.3	.3	.3	.3	.3	.4	.3	.4	.3
Nov	0	.2	.0	.2	.2	.2	.3	.2	.3	.2
Dec	.1	.3	0	.2	.2	.3	.1	.3	0	.3
1985: Jan	.2	.2	0	.3	.3	.4	.2	.4	.2	.5
Feb	.4	.3	.3	.3	.5	.5	.5	.6	.5	.5
Mar	.4	.5	.5	.6	.4	.3	.4	.4	.5	.4
Apr	.4	.4	.5	.5	.2	.2	.3	.3	.3	.2
May	.4	.2	.5	.3	.2	.3	.3	.3	0	0
June	.3	.2	.4	.2	.2	.2	.2	.3	.1	.2
July	.2	.2	.2	.2	.2	.3	.2	.3	.1	.1
Aug	.2	.2	.2	.2	.3	.3	.4	.3	.2	.2
Sept	.3	.2	.4	.2	.4	.2	.5	.2	.6	.2
Oct	.3	.3	.4	.3	.5	.5	.6	.5	.7	.5
Nov	.3	.6	.3	.5	.4	.5	.5	.4	.4	.4
Dec	.2	.4	.1	.3	.2	.4	.1	.3	.0	.2

[1] Changes from December to December are based on unadjusted indexes.

Note.—Data beginning 1978 are for all urban consumers; earlier data are for urban wage earners and clerical workers. See also Note, Table B-55.

Source: Department of Labor, Bureau of Labor Statistics.

Table B-59.—*Changes in consumer price indexes, commodities and services, 1929–85*

[Percent change]

Year	All items		Commodities						Services				Energy[2]	
			Total		Food		Commodities less food		Total		Medical care services			
	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year	Dec. to Dec.[1]	Year to year
1929	0.2	0			2.3	1.3								
1933	.5	−5.1			7.0	−2.9								
1939	−.5	−1.4	−1.0	−2.0	−2.5	−2.8	0.2	−1.6	0.2	0.2	0.3	0.3		
1940	1.0	1.0	1.2	1.0	2.6	1.7	.4	.6	.7	.2	0	0		
1941	9.7	5.0	13.5	6.7	16.4	9.1	10.8	5.0	2.5	1.4	1.5	.6		
1942	9.3	10.7	13.0	14.5	17.5	17.4	6.4	11.1	2.0	3.2	3.9	3.1		
1943	3.2	6.1	4.0	8.9	3.1	11.5	5.4	4.3	2.6	1.8	5.8	5.0		
1944	2.1	1.7	2.2	1.3	.2	−1.4	5.0	5.5	1.7	2.4	2.8	4.2		
1945	2.3	2.3	2.9	2.9	3.0	2.2	3.0	4.1	1.0	1.5	2.9	2.7		
1946	18.2	8.5	24.9	10.8	31.5	14.6	12.9	6.2	3.5	1.9	8.9	5.8		
1947	9.0	14.4	10.4	20.2	11.2	21.5	9.1	12.8	5.2	4.1	6.5	8.5		
1948	2.7	7.8	1.7	7.2	−0.8	8.5	5.3	7.7	6.1	6.3	7.0	6.7		
1949	−1.8	−1.0	−4.1	−2.6	−3.7	−4.0	−4.8	−1.5	3.6	4.8	2.1	3.7		
1950	5.8	1.0	7.7	.6	9.6	1.4	5.7	−.1	3.6	3.2	3.3	2.3		
1951	5.9	7.9	5.9	9.0	7.4	11.1	4.6	7.5	5.2	5.3	5.8	5.1		
1952	.9	2.2	−.7	1.3	−1.1	1.8	−.5	.9	4.6	4.4	5.5	6.4		
1953	.6	.8	−.6	−.3	−1.3	−1.5	.2	.2	4.2	4.3	3.6	3.6		
1954	−.5	.5	−1.4	−.9	−1.6	−.2	−1.4	−1.1	1.9	3.3	2.6	3.0		
1955	.4	−.4	−.4	−.9	−.9	−1.4	0	−.7	2.3	2.0	3.2	2.9		
1956	2.9	1.5	2.6	.9	3.1	.7	2.5	1.0	3.1	2.5	4.1	4.0		
1957	3.0	3.6	2.6	3.1	2.8	3.3	2.2	3.1	4.5	4.0	4.5	4.3		
1958	1.8	2.7	1.3	2.3	2.2	4.2	.8	1.1	2.7	3.8	4.9	4.9	−0.7	0.2
1959	1.5	.8	.6	.1	−.8	−1.6	1.5	1.3	3.7	2.9	4.6	4.8	4.3	1.7
1960	1.5	1.6	1.1	.9	3.1	1.0	−.3	.4	2.7	3.3	3.8	4.0	1.5	2.6
1961	.7	1.0	0	.5	−.9	1.3	.6	.3	1.9	2.0	3.5	3.7	−1.1	.2
1962	1.2	1.1	1.0	.9	1.5	.9	.7	.7	1.7	1.9	3.0	3.2	2.1	.3
1963	1.6	1.2	1.4	.9	1.9	1.4	1.2	.7	2.3	2.0	2.6	3.0	−.8	.3
1964	1.2	1.3	.8	1.1	1.4	1.3	.4	.8	1.8	1.9	2.6	2.4	−.2	−.4
1965	1.9	1.7	1.6	1.2	3.4	2.2	.7	.6	2.6	2.2	3.5	3.2	2.0	1.8
1966	3.4	2.9	2.5	2.6	3.9	5.0	1.9	1.4	4.9	3.9	8.1	5.4	1.8	1.6
1967	3.0	2.9	2.5	1.8	1.2	.9	3.1	2.6	4.0	4.4	7.9	8.7	1.4	2.2
1968	4.7	4.2	3.8	3.7	4.3	3.6	3.7	3.7	6.1	5.2	7.4	7.3	1.7	1.5
1969	6.1	5.4	5.5	4.5	7.2	5.1	4.5	4.2	7.4	6.9	7.0	8.1	3.1	2.7
1970	5.5	5.9	4.0	4.7	2.2	5.5	4.8	4.1	8.2	8.1	8.3	7.1	4.5	2.7
1971	3.4	4.3	2.9	3.4	4.3	3.0	2.3	3.8	4.1	5.6	5.3	7.3	3.1	3.9
1972	3.4	3.3	3.4	3.0	4.7	4.3	2.5	2.2	3.6	3.8	3.8	3.7	2.8	2.8
1973	8.8	6.2	10.4	7.4	20.1	14.5	5.0	3.4	6.2	4.4	5.8	4.4	16.8	8.0
1974	12.2	11.0	12.7	12.0	12.2	14.4	13.2	10.6	11.3	9.3	13.3	10.3	21.6	29.3
1975	7.0	9.1	6.3	8.9	6.5	8.5	6.2	9.2	8.1	9.5	10.3	12.6	11.6	10.6
1976	4.8	5.8	3.3	4.3	.6	3.1	5.1	5.0	7.3	8.3	10.7	10.1	6.9	7.2
1977	6.8	6.5	6.1	5.8	8.0	6.3	4.9	5.4	7.9	7.7	9.0	9.9	7.2	9.5
1978	9.0	7.7	8.9	7.1	11.8	10.0	7.7	5.8	9.3	8.5	9.2	8.6	8.0	6.3
1979	13.3	11.3	13.0	11.4	10.2	10.9	14.3	11.7	13.7	11.0	10.6	9.7	37.4	25.2
1980	12.4	13.5	11.1	12.2	10.2	8.6	11.5	13.8	14.2	15.4	10.0	11.3	18.1	30.9
1981	8.9	10.4	6.0	8.4	4.3	7.9	6.7	8.6	13.0	13.1	12.7	10.7	11.9	13.5
1982	3.9	6.1	3.6	4.0	3.1	4.0	3.8	4.0	4.3	9.0	11.2	11.9	1.3	1.5
1983	3.8	3.2	2.9	2.9	2.6	2.1	3.1	3.2	4.8	3.5	6.1	8.7	−.5	.8
1984	4.0	4.3	2.6	3.4	3.8	3.8	2.0	3.1	5.4	5.2	5.8	6.0	.2	1.0
1985	3.8	3.6	2.5	2.1	2.7	2.3	2.4	2.1	5.1	5.1	6.8	6.0	1.8	.7

[1] Changes from December to December are based on unadjusted indexes.

[2] Fuel oil, coal, and bottled gas; gas (piped) and electricity; and motor fuel. Motor oil, coolant, etc. also included through 1982.

Note.—Data beginning 1978 are for all urban consumers; earlie: data are for urban wage earners and clerical workers. See also Note, Table B-55.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-60.—*Producer price indexes by stage of processing, 1947–85*

[1967=100]

Year or month	Finished goods									
	Total finished goods	Consumer foods			Finished goods excluding consumer foods					Total finished consumer goods
		Total	Crude	Processed	Total	Consumer goods			Capital equipment	
						Total	Durable	Nondurable		
1947	74.0	82.8	99.4	80.2		79.0	74.6	80.7	55.4	80.5
1948	79.9	90.4	107.1	87.6		84.0	79.7	85.8	60.4	86.5
1949	77.6	83.1	101.3	80.1		82.2	81.8	82.3	63.4	82.5
1950	79.0	84.7	92.2	83.4		83.5	82.7	83.6	64.9	83.9
1951	86.5	95.2	105.9	93.2		89.5	88.2	90.0	71.2	91.8
1952	86.0	94.3	112.8	91.3		88.3	88.9	87.8	72.4	90.7
1953	85.1	89.4	105.2	86.7		89.1	89.6	88.6	73.6	89.2
1954	85.3	88.7	94.7	87.6		89.4	90.3	88.9	74.5	89.1
1955	85.5	86.5	98.8	84.4		90.1	91.2	89.4	76.7	88.5
1956	87.9	86.3	98.7	84.3		92.3	94.3	91.1	82.4	89.8
1957	91.1	89.3	97.4	87.9		94.6	97.1	93.2	87.5	92.4
1958	93.2	94.5	103.5	93.1		94.7	98.4	92.6	89.8	94.4
1959	93.0	90.1	94.3	89.5		95.9	99.6	94.0	91.5	93.6
1960	93.7	92.1	100.6	90.7		96.3	99.2	94.7	91.7	94.5
1961	93.7	91.7	96.1	90.9		96.2	98.8	94.7	91.8	94.3
1962	94.0	92.5	97.0	91.7		96.0	98.3	94.8	92.2	94.6
1963	93.7	91.4	95.5	90.7		96.0	97.8	95.1	92.4	94.1
1964	94.1	91.9	98.2	90.8		95.9	98.2	94.8	93.3	94.3
1965	95.7	95.4	98.6	94.9		96.6	97.9	95.9	94.4	96.1
1966	98.8	101.6	104.8	101.0		98.1	98.5	97.8	96.8	99.4
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	102.8	103.6	107.5	103.0	102.6	102.1	102.2	102.2	103.5	102.7
1969	106.6	110.0	116.0	108.9	105.4	104.6	104.0	105.0	106.9	106.6
1970	110.3	113.5	116.3	113.1	109.1	107.7	106.9	108.3	112.0	109.9
1971	113.7	115.3	115.8	115.1	113.1	111.4	110.8	111.7	116.6	112.9
1972	117.2	121.7	121.2	121.7	115.4	113.5	113.3	113.6	119.5	116.6
1973	127.9	146.4	160.7	143.9	120.1	118.6	115.4	120.5	123.5	129.2
1974	147.5	166.9	180.8	164.6	139.3	138.6	125.9	146.8	141.0	149.3
1975	163.4	181.0	181.2	181.3	156.2	153.1	138.2	163.0	162.5	163.6
1976	170.6	180.4	193.9	177.8	166.1	162.6	144.5	174.8	173.4	169.7
1977	181.7	189.9	201.0	187.3	177.7	174.3	152.8	189.3	184.6	180.7
1978	195.9	207.2	216.8	204.6	190.7	186.7	166.9	200.0	199.2	194.9
1979	217.7	226.2	233.1	223.8	213.3	211.5	183.2	231.3	216.5	217.9
1980	247.0	239.5	237.2	237.8	247.8	250.8	206.2	283.9	239.8	248.9
1981	269.8	253.6	263.8	250.6	273.3	276.5	218.6	319.6	264.3	271.3
1982	280.7	259.3	252.7	257.7	285.8	287.8	226.7	333.6	279.4	281.0
1983	285.2	261.8	258.7	260.0	290.8	291.4	233.1	335.3	287.2	284.6
1984	291.1	273.3	281.6	270.3	294.8	294.1	236.8	337.3	294.0	290.3
1985 [1]	293.8	271.2	261.9	269.9	299.1	297.4	241.5	339.4	300.5	291.9
1984: Jan	289.5	272.2	306.9	266.9	292.9	292.5	235.9	335.0	291.6	288.9
Feb	290.6	274.7	313.6	269.0	293.6	293.1	236.1	336.1	292.3	290.1
Mar	291.4	276.6	323.7	270.2	294.0	293.6	236.6	336.7	292.3	291.1
Apr	291.2	274.3	299.0	269.9	294.6	293.5	236.7	336.4	294.5	290.3
May	291.1	271.7	270.7	269.6	295.3	294.9	236.6	338.9	293.9	290.3
June	290.9	270.8	258.9	269.7	295.4	294.9	236.4	339.2	293.9	290.1
July	292.3	275.3	270.8	273.4	295.7	295.0	236.6	339.2	294.6	291.6
Aug	291.3	274.0	274.6	271.7	294.8	293.8	236.7	336.9	294.6	290.4
Sept	289.5	273.0	270.3	271.1	292.7	291.7	233.0	336.2	292.5	288.7
Oct	291.5	271.1	269.5	269.1	296.1	295.0	238.3	337.8	295.9	290.3
Nov	292.3	272.0	257.6	271.0	296.9	295.9	239.0	338.9	296.5	291.2
Dec	292.0	273.6	263.0	272.3	295.8	294.8	239.2	336.7	295.6	290.9
1985: Jan	292.1	273.7	255.4	273.1	296.0	294.3	240.2	334.9	297.4	290.6
Feb	292.6	275.6	279.4	273.1	295.9	293.5	240.9	332.7	299.2	290.7
Mar	292.1	273.7	275.5	271.3	296.0	293.6	240.4	333.4	299.3	290.1
Apr	293.1	272.2	279.9	269.3	297.8	295.9	240.7	337.4	299.9	291.2
May	294.1	269.5	254.2	268.7	300.1	299.0	241.4	342.4	300.3	292.4
June	294.0	268.7	237.0	269.3	300.2	299.0	241.9	342.1	300.5	292.2
July	294.8	271.2	261.5	269.9	300.5	299.2	241.9	342.4	300.8	293.1
Aug [1]	293.5	268.7	251.2	268.1	299.5	297.8	241.8	340.0	301.0	291.4
Sept	290.2	266.5	249.1	265.9	296.0	294.7	234.4	340.3	296.4	288.5
Oct	294.8	268.7	247.3	268.4	301.4	299.4	244.9	340.2	303.7	292.4
Nov	296.7	272.0	265.3	270.3	302.7	301.1	245.0	343.3	303.8	294.7
Dec	297.2	274.4	287.3	271.0	302.5	301.1	244.4	343.7	303.5	295.4

See next page for continuation of table.

TABLE B-60.—*Producer price indexes by stage of processing, 1947–85*—Continued

[1967=100]

Year or month	Intermediate materials, supplies, and components								Crude materials for further processing				
	Total	Foods and feeds [2]	Other	Materials and components		Processed fuels and lubricants	Containers	Supplies	Total	Foodstuffs and feedstuffs	Other		
				For manufacturing	For construction						Total	Fuel	Other
1947	72.4	....	70.0	72.1	66.0	85.5	66.8	77.5	101.2	111.7	....	66.6	90.6
1948	78.3	....	76.1	77.8	73.1	96.9	69.8	81.0	110.9	120.8	....	78.7	100.7
1949	75.2	....	74.2	74.5	73.2	88.2	70.1	76.3	96.0	100.3	....	78.3	91.6
1950	78.6	....	77.7	78.1	77.0	89.9	72.0	78.9	104.6	107.6	....	77.9	104.7
1951	88.1	....	87.0	88.5	84.3	93.9	84.5	88.8	120.1	124.5	....	79.4	120.7
1952	85.5	....	84.3	84.8	83.7	92.8	79.9	88.8	110.3	117.2	....	79.9	104.6
1953	86.0	....	85.3	86.2	85.1	93.4	80.0	84.3	101.9	104.9	....	82.7	100.1
1954	86.5	....	85.7	86.3	85.5	93.3	81.5	86.3	101.0	104.9	....	79.0	98.2
1955	88.1	....	88.3	88.4	88.9	93.3	82.6	84.8	97.1	95.1	....	78.8	103.8
1956	92.0	....	92.6	92.6	93.5	96.2	88.6	87.1	97.6	93.1	....	84.4	107.6
1957	94.1	....	95.0	94.8	94.0	101.9	92.5	88.0	99.8	97.2	....	89.2	106.2
1958	94.3	....	94.8	95.2	94.0	96.0	94.7	90.0	102.0	103.0	....	90.3	102.2
1959	95.6	....	96.4	96.5	96.6	95.6	94.2	91.2	99.4	96.2	....	91.9	105.8
1960	95.6	....	96.8	96.5	95.9	98.2	95.5	90.7	97.0	95.1	....	92.8	101.4
1961	95.0	....	95.5	95.3	94.6	99.4	94.7	91.8	96.5	93.8	....	92.6	102.5
1962	94.9	....	95.3	94.7	94.2	99.0	95.9	93.8	97.5	95.7	....	92.1	102.0
1963	95.2	....	95.0	94.9	94.5	98.1	94.7	95.2	95.4	92.9	....	93.2	100.7
1964	95.5	....	95.6	95.9	95.4	96.0	94.0	94.3	94.5	90.8	....	92.8	102.4
1965	96.8	....	96.9	97.4	96.2	97.4	95.8	95.2	99.3	97.1	....	93.5	104.5
1966	99.2	....	98.9	99.3	98.8	99.2	98.4	99.4	105.7	105.9	....	96.3	106.7
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	102.3	99.4	102.5	102.2	105.0	97.6	102.4	101.0	101.6	101.3	102.2	102.3	102.1
1969	105.8	102.7	106.1	105.8	110.8	98.5	106.3	102.8	108.4	109.3	106.8	106.6	106.9
1970	109.9	109.1	109.9	110.0	112.6	105.0	111.4	108.0	112.3	112.0	112.7	122.6	109.8
1971	114.1	111.7	114.3	112.8	119.7	115.2	116.6	111.0	115.1	114.2	117.0	139.0	110.7
1972	118.7	118.5	118.9	117.0	126.2	118.9	121.9	115.6	127.6	127.5	128.0	148.7	121.9
1973	131.6	168.4	128.1	127.7	136.7	131.5	129.2	140.6	174.0	180.0	162.5	164.5	161.5
1974	162.9	200.2	159.5	162.2	161.6	199.1	152.2	154.5	196.1	189.4	208.9	219.4	205.4
1975	180.0	195.3	178.6	178.7	176.4	233.0	171.4	168.1	196.9	191.8	206.9	271.5	188.3
1976	189.1	185.3	189.4	185.4	188.4	250.1	180.2	179.0	202.7	190.2	228.5	305.3	206.7
1977	201.5	190.5	202.3	195.4	203.4	282.5	188.3	188.7	209.2	192.1	245.0	372.1	212.2
1978	215.6	203.1	216.5	208.7	224.7	295.3	202.8	198.5	234.4	216.2	272.3	426.8	233.1
1979	243.2	226.1	244.4	234.4	247.4	364.8	226.8	218.2	274.3	247.9	330.0	507.6	284.5
1980	280.3	252.6	282.3	265.7	268.3	503.0	254.5	244.5	304.6	259.2	401.0	615.0	346.1
1981	306.0	250.3	310.1	286.1	287.6	595.4	276.1	263.8	329.0	257.4	482.3	751.2	413.7
1982	310.4	239.4	315.7	289.8	293.7	591.7	285.6	272.1	319.5	247.8	473.9	886.1	376.8
1983	312.3	247.9	317.1	293.4	301.8	564.8	286.6	277.1	323.6	252.2	477.4	931.5	372.2
1984	320.0	253.1	325.0	301.8	310.3	566.2	302.3	283.4	330.8	259.5	484.5	931.3	380.5
1985 [1]	318.7	232.7	325.0	299.4	315.2	549.4	311.2	284.2	306.2	235.0	459.7	912.3	355.4
1984: Jan	316.3	260.7	320.6	298.9	305.5	556.4	292.3	282.6	333.5	264.0	483.4	926.1	380.1
Feb	317.6	255.1	322.3	299.8	307.8	561.3	294.8	282.2	332.6	260.5	488.1	926.6	385.5
Mar	319.7	257.5	324.4	301.8	309.6	567.8	297.3	283.0	338.8	269.9	487.5	910.6	387.8
Apr	320.3	259.1	325.0	302.9	310.5	562.9	299.4	284.2	339.4	269.7	490.1	920.8	388.8
May	320.9	260.8	325.4	303.3	309.8	567.2	300.9	284.3	338.0	266.4	492.3	928.4	389.9
June	321.6	257.8	326.4	303.4	310.3	575.2	301.8	283.9	333.0	260.3	489.6	932.6	386.1
July	321.7	255.3	326.7	303.2	310.9	576.6	303.0	283.2	334.1	263.6	486.4	940.2	380.9
Aug	321.1	251.4	326.3	302.5	312.0	569.2	304.1	284.1	328.9	256.5	485.0	953.1	376.8
Sept	320.3	248.1	325.7	301.9	311.7	565.3	305.2	283.6	326.2	252.7	484.6	937.6	379.3
Oct	320.1	244.0	325.8	301.4	311.8	564.1	308.8	283.2	319.6	244.9	480.3	935.9	374.7
Nov	320.4	244.3	326.1	301.7	311.8	566.6	310.1	282.9	323.2	252.8	475.2	934.0	369.2
Dec	319.9	243.0	325.6	301.1	312.4	561.3	310.4	283.1	322.4	253.0	472.0	929.8	366.4
1985: Jan	319.5	240.7	325.4	300.6	313.4	556.3	311.1	283.9	318.9	250.7	466.0	916.6	361.9
Feb	318.7	239.2	324.5	300.5	313.3	546.3	311.8	283.8	318.1	250.0	465.1	930.5	358.2
Mar	318.6	236.7	324.7	300.0	313.5	547.9	313.1	283.8	312.3	242.9	462.0	910.8	358.4
Apr	319.3	235.4	325.5	300.6	314.0	552.3	312.4	283.7	311.0	239.9	464.2	915.0	360.2
May	319.9	232.6	326.4	300.5	315.9	558.0	311.7	283.4	309.1	236.3	466.0	938.8	357.7
June	319.3	232.2	325.7	300.3	317.3	549.1	312.0	283.3	305.6	233.7	460.5	924.8	354.0
July	318.6	231.7	325.0	299.8	316.9	544.0	311.4	283.6	303.9	231.6	459.6	921.6	353.5
Aug [1]	317.9	227.1	324.5	299.1	316.5	539.8	310.3	284.1	295.3	221.0	454.7	904.0	351.2
Sept	317.9	225.5	324.6	298.3	315.5	546.3	309.9	284.3	292.4	215.9	456.4	908.1	352.5
Oct	317.8	228.5	324.3	298.0	315.4	544.9	310.4	285.0	298.0	224.5	455.8	899.6	353.3
Nov	318.1	231.0	324.5	297.6	315.1	550.7	309.8	285.8	305.6	236.7	454.2	894.9	352.3
Dec	318.8	231.7	325.2	297.6	315.4	557.3	310.7	285.9	304.7	236.8	451.3	883.0	351.1

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[1] Data have been revised through August 1985 to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.

[2] Intermediate materials for food manufacturing and feeds.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-61.—*Producer price indexes by stage of processing, special groups, 1974–85*

[1967 = 100]

Year or month	Finished goods						Intermediate materials, supplies, and components				Crude materials for further processing			
	Total	Foods	Energy	Excluding foods and energy			Total	Foods and feeds[1]	Energy	Other	Total	Foodstuffs and feedstuffs	Energy	Other
				Total	Capital equipment	Consumer goods excluding foods and energy								
1974	147.5	166.9	215.2	133.3	141.0	129.1	162.9	200.2	188.7	156.7	196.1	189.4	223.0	198.3
1975	163.4	181.0	252.4	148.5	162.5	141.0	180.0	195.3	220.8	174.7	196.9	191.8	266.9	165.0
1976	170.6	180.4	282.3	156.8	173.4	148.1	189.1	185.3	236.8	185.0	202.7	190.2	283.1	191.0
1977	181.7	189.9	326.7	166.3	184.6	156.6	201.5	190.5	267.3	196.1	209.2	192.1	323.5	190.1
1978	195.9	207.2	347.7	178.7	199.2	168.0	215.6	203.1	280.3	210.4	234.4	216.2	362.5	209.2
1979	217.7	226.2	469.9	194.7	216.5	183.3	243.2	226.1	348.6	234.2	274.3	247.9	439.9	253.0
1980	247.0	239.5	701.3	216.4	239.8	204.2	280.3	252.6	484.9	261.8	304.6	259.2	586.1	269.4
1981	269.8	253.6	835.4	235.1	264.3	220.1	306.0	250.3	573.6	283.4	329.0	257.4	783.4	266.0
1982	280.7	259.3	822.9	248.6	279.4	232.6	310.4	239.4	570.8	290.1	319.5	247.8	801.5	238.1
1983	285.2	261.8	783.6	256.1	287.2	239.9	312.3	247.9	543.9	294.8	323.6	252.2	791.1	250.7
1984	291.1	273.3	750.3	262.3	294.0	245.9	320.0	253.1	545.0	303.6	330.8	259.5	785.2	266.1
1985[2]	293.8	271.2	721.4	268.7	300.5	252.1	318.7	232.7	528.8	305.2	306.2	235.0	749.1	249.7
1984: Jan	289.5	272.2	753.8	260.1	291.6	243.8	316.3	260.7	536.2	299.5	333.5	264.0	786.0	263.7
Feb	290.6	274.7	757.3	260.6	292.3	244.2	317.6	255.1	540.8	301.0	332.6	260.5	786.4	271.1
Mar	291.4	276.6	757.9	261.0	292.3	244.7	319.7	257.5	546.7	302.7	338.8	269.9	780.1	274.3
Apr	291.2	274.3	751.1	262.0	294.5	245.2	320.3	259.1	542.2	303.8	339.4	269.7	783.1	276.4
May	291.1	271.7	762.7	262.1	293.9	245.6	320.9	260.8	546.2	303.9	338.0	266.4	786.4	277.8
June	290.9	270.8	764.8	262.0	293.9	245.5	321.6	257.8	553.5	304.2	333.0	260.3	787.7	272.8
July	292.3	275.3	755.6	262.8	294.6	246.4	321.7	255.3	554.5	304.4	334.1	263.6	790.5	265.6
Aug	291.3	274.0	741.0	262.9	294.6	246.4	321.1	251.4	547.7	304.8	328.9	256.5	795.0	260.4
Sept	289.5	273.0	732.1	261.2	292.5	245.0	320.3	248.1	544.0	304.5	326.2	252.7	788.5	264.0
Oct	291.5	271.1	743.5	264.1	295.9	247.5	320.1	244.0	543.0	304.7	319.6	244.9	787.2	258.0
Nov	292.3	272.0	747.6	264.6	296.5	248.1	320.4	244.3	545.2	304.8	323.2	252.8	778.4	255.5
Dec	292.0	273.6	736.0	264.3	295.6	248.0	319.9	243.0	540.4	304.8	322.4	253.0	773.1	253.9
1985: Jan	292.1	273.7	711.7	266.0	297.4	249.6	319.5	240.7	535.7	305.1	318.9	250.7	757.5	254.4
Feb	292.6	275.6	692.0	267.2	299.2	250.5	318.7	239.2	526.0	305.3	318.1	250.0	754.1	255.3
Mar	292.1	273.7	693.2	267.2	299.3	250.5	318.6	236.7	527.5	305.2	312.3	242.9	746.4	255.4
Apr	293.1	272.2	714.9	267.7	299.9	251.1	319.3	235.4	531.5	305.6	311.0	239.9	749.1	257.3
May	294.1	269.5	746.1	268.2	300.3	251.5	319.9	232.6	536.7	305.9	309.1	236.3	760.7	252.3
June	294.0	268.7	741.4	268.6	300.5	252.0	319.3	232.2	528.6	306.0	305.6	233.7	754.5	247.4
July	294.8	271.2	733.8	269.4	300.8	252.9	318.6	231.7	523.8	305.6	303.9	231.6	752.6	247.2
Aug[2]	293.5	268.7	719.9	269.4	301.0	252.9	317.9	227.1	519.8	305.5	295.3	221.0	742.9	245.8
Sept	290.2	266.5	718.9	265.6	296.4	249.5	317.9	225.5	526.0	304.9	292.4	215.9	745.4	246.9
Oct	294.8	268.7	716.1	271.6	303.7	254.9	317.8	228.5	524.4	304.6	298.0	224.5	743.4	247.2
Nov	296.7	272.0	732.9	271.8	303.8	255.1	318.1	231.0	529.5	304.2	305.6	236.7	742.9	244.9
Dec	297.2	274.4	736.1	271.4	303.5	254.7	318.8	231.7	536.3	304.2	304.7	236.8	739.5	242.6

[1] Intermediate materials for food manufacturing and feeds.

[2] Data have been revised through August 1985 to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-62.—*Producer price indexes for major commodity groups, 1947–85*

[1967 = 100]

Year or month	Farm products and processed foods and feeds			Industrial commodities				
	Total	Farm products	Processed foods and feeds	Total	Textile products and apparel	Hides, skins, leather, and related products	Fuels and related products, and power [1]	Chemicals and allied products [1]
1947	94.3	109.4	82.9	70.8	103.6	83.3	76.9	93.7
1948	101.5	117.5	88.7	76.9	108.1	84.2	90.5	95.9
1949	89.6	101.6	80.6	75.3	98.9	79.9	86.2	87.6
1950	93.9	106.7	83.4	78.0	102.7	86.3	87.1	88.9
1951	106.9	124.2	92.7	86.1	114.6	99.1	90.3	101.7
1952	102.7	117.2	91.6	84.1	103.4	80.1	90.1	96.5
1953	96.0	106.2	87.4	84.8	100.8	81.3	92.6	97.7
1954	95.7	104.7	88.9	85.0	98.6	77.6	91.3	98.9
1955	91.2	98.2	85.0	86.9	98.7	77.3	91.2	98.5
1956	90.6	96.9	84.9	90.8	98.7	81.9	94.0	99.1
1957	93.7	99.5	87.4	93.3	98.8	82.0	99.1	101.2
1958	98.1	103.9	91.8	93.6	97.0	82.9	95.3	102.0
1959	93.5	97.5	89.4	95.3	98.4	94.2	95.3	101.6
1960	93.7	97.2	89.5	95.3	99.5	90.8	96.1	101.8
1961	93.7	96.3	91.0	94.8	97.7	91.7	97.2	100.7
1962	94.7	98.0	91.9	94.8	98.6	92.7	96.7	99.1
1963	93.8	96.0	92.5	94.7	98.5	90.0	96.3	97.9
1964	93.2	94.6	92.3	95.2	99.2	90.3	93.7	98.3
1965	97.1	98.7	95.5	96.4	99.8	94.3	95.5	99.0
1966	103.5	105.9	101.2	98.5	100.1	103.4	97.8	99.4
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	102.4	102.5	102.2	102.5	103.7	103.2	98.9	99.8
1969	108.0	109.1	107.3	106.0	106.0	108.9	100.9	99.9
1970	111.7	111.0	112.1	110.0	107.1	110.3	106.2	102.2
1971	113.9	112.9	114.5	114.1	109.0	114.1	115.2	104.1
1972	122.4	125.0	120.8	117.9	113.6	131.3	118.6	104.2
1973	159.1	176.3	148.1	125.9	123.8	143.1	134.3	110.0
1974	177.4	187.7	170.9	153.8	139.1	145.1	208.3	146.8
1975	184.2	186.7	182.6	171.5	137.9	148.5	245.1	181.3
1976	183.1	191.0	178.0	182.4	148.2	167.8	265.6	187.2
1977	188.8	192.5	186.1	195.1	154.0	179.3	302.2	192.8
1978	206.6	212.5	202.6	209.4	159.8	200.0	322.5	198.8
1979	229.8	241.4	222.5	236.5	168.7	252.4	408.1	222.3
1980	244.7	249.4	241.2	274.8	183.5	248.9	574.0	260.3
1981	251.5	254.9	248.7	304.1	199.7	260.9	694.5	287.6
1982	248.9	242.4	251.5	312.3	204.6	262.6	693.2	292.3
1983	253.9	248.2	255.9	315.7	205.1	271.1	664.7	293.0
1984	262.4	255.8	265.0	322.6	210.0	286.3	656.8	300.8
1985 [2]	250.5	230.4	260.5	323.9	210.4	286.2	634.2	303.0
1984: Jan	264.4	263.4	263.8	319.1	208.2	279.1	652.1	298.1
Feb	263.4	261.6	263.4	320.6	209.6	283.3	656.0	296.5
Mar	267.9	267.4	267.1	321.9	209.9	286.7	658.7	300.1
Apr	267.3	265.4	267.2	322.6	209.9	286.8	654.7	302.0
May	265.8	260.8	267.5	323.2	210.5	288.5	660.6	302.7
June	262.8	257.1	264.8	323.8	210.2	290.1	665.9	302.2
July	264.9	258.7	267.3	323.9	210.5	288.9	665.0	302.6
Aug	261.4	253.3	264.8	323.3	210.1	288.7	657.9	301.1
Sept	259.4	249.8	263.6	322.2	210.7	288.7	652.3	300.9
Oct	255.3	240.2	262.6	323.4	210.4	287.7	654.4	301.3
Nov	258.1	245.7	263.8	323.8	210.2	283.8	655.3	301.6
Dec	258.6	245.7	264.5	323.0	210.0	283.6	648.5	300.7
1985: Jan	257.6	243.2	264.4	322.9	210.3	283.7	636.8	301.6
Feb	258.0	245.3	263.9	322.2	210.6	283.7	625.3	302.2
Mar	254.6	238.8	262.3	322.5	210.5	282.4	625.3	302.6
Apr	253.1	236.8	260.9	323.8	210.7	284.7	633.9	303.3
May	250.2	230.4	260.0	325.3	210.5	284.2	647.3	303.2
June	249.1	229.4	258.8	324.8	210.2	285.5	640.6	303.7
July	249.6	229.3	259.7	324.4	210.2	284.6	635.4	304.6
Aug [2]	244.0	218.0	257.3	323.7	210.4	286.3	627.6	304.6
Sept	241.4	212.9	256.0	322.5	210.6	287.0	631.2	303.3
Oct	245.3	219.5	258.4	324.4	210.2	289.4	629.2	302.8
Nov	251.0	230.1	261.5	325.0	210.2	290.4	636.8	302.6
Dec	252.1	231.6	262.3	325.2	210.7	292.6	640.9	301.5

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[1] Prices for some items in this grouping are lagged and refer to 1 month earlier than the index month; the lag for refined petroleum items was eliminated beginning with the June 1985 data.

See next page for continuation of table.

TABLE B–62.—*Producer price indexes for major commodity groups, 1947–85*—Continued

[1967 = 100]

Year or month	Industrial commodities—Continued								
	Rubber and plastic products	Lumber and wood products	Pulp, paper, and allied products	Metals and metal products	Machinery and equipment	Furniture and household durables	Non-metallic mineral products	Transportation equipment: Motor vehicles and equipment [3]	Miscellaneous products
1947	70.5	73.4	72.5	54.9	53.7	77.0	66.3	64.1	73.5
1948	72.8	84.0	75.7	62.5	58.2	81.6	71.6	70.8	76.5
1949	70.5	77.7	72.4	63.0	61.0	82.9	73.5	75.7	78.0
1950	85.9	89.3	74.3	66.3	63.1	84.7	75.4	75.3	79.2
1951	105.4	97.2	88.0	73.8	70.5	91.8	80.1	79.4	83.9
1952	95.5	94.4	85.7	73.9	70.6	90.1	80.1	84.0	83.4
1953	89.1	94.3	85.5	76.3	72.2	91.9	83.3	83.6	85.6
1954	90.4	92.6	85.5	76.9	73.4	92.9	85.1	83.8	86.4
1955	102.4	97.1	87.8	82.1	75.7	93.3	87.5	86.3	86.5
1956	103.8	98.5	93.6	89.2	81.8	95.8	91.3	91.2	87.6
1957	103.4	93.5	95.4	91.0	87.6	98.3	94.8	95.1	90.2
1958	103.3	92.4	96.4	90.4	89.4	99.1	95.8	98.1	92.0
1959	102.9	98.8	97.3	92.3	91.3	99.3	97.0	100.3	92.2
1960	103.1	95.3	98.1	92.4	92.0	99.0	97.2	98.8	93.0
1961	99.2	91.0	95.2	91.9	91.9	98.4	97.6	98.6	93.3
1962	96.3	91.6	96.3	91.2	92.0	97.7	97.6	98.6	93.7
1963	96.8	93.5	95.6	91.3	92.2	97.0	97.1	97.8	94.5
1964	95.5	95.4	95.4	93.8	92.8	97.4	97.3	98.3	95.2
1965	95.9	95.9	96.2	96.4	93.9	96.9	97.5	98.5	95.9
1966	97.8	100.2	98.8	98.8	96.8	98.0	98.4	98.6	97.7
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	103.4	113.3	101.1	102.6	103.2	102.8	103.7	102.8	102.2
1969	105.3	125.3	104.0	108.5	106.5	104.9	107.7	104.8	105.2
1970	108.3	113.6	108.2	116.6	111.4	107.5	112.9	108.7	109.9
1971	109.1	127.3	110.1	118.7	115.5	110.0	122.4	114.9	112.9
1972	109.3	144.3	113.4	123.5	117.9	111.4	126.1	118.0	114.6
1973	112.4	177.2	122.1	132.8	121.7	115.2	130.2	119.2	119.7
1974	136.2	183.6	151.7	171.9	139.4	127.9	153.2	129.2	133.1
1975	150.2	176.9	170.4	185.6	161.4	139.7	174.0	144.6	147.7
1976	159.2	205.6	179.4	195.9	171.0	145.6	186.3	153.8	153.7
1977	167.6	236.3	186.4	209.0	181.7	151.5	200.5	163.7	164.3
1978	174.8	276.0	195.6	227.1	196.1	160.4	222.8	176.0	184.3
1979	194.3	300.4	219.0	259.3	213.9	171.3	248.6	190.5	208.7
1980	217.4	288.9	249.2	286.4	239.8	187.7	283.0	208.8	258.8
1981	232.6	292.8	273.8	300.4	263.3	198.5	309.5	237.6	265.7
1982	241.4	284.7	288.7	301.6	278.8	206.9	320.2	251.3	276.4
1983	243.2	307.1	298.1	307.2	286.4	214.0	325.2	256.8	289.6
1984	246.8	307.4	318.5	316.1	293.1	218.7	337.3	261.5	295.9
1985 [2]	245.8	303.6	327.3	314.9	298.9	221.7	347.8	267.3	302.3
1984: Jan	244.8	309.1	309.1	312.9	289.7	216.8	330.1	261.1	294.5
Feb	246.2	315.7	312.0	314.8	290.2	217.2	332.2	261.2	294.9
Mar	246.4	316.8	314.0	316.8	291.0	217.4	333.4	261.5	294.9
Apr	247.3	315.1	316.3	317.9	292.2	218.2	335.8	261.9	294.6
May	247.5	308.5	317.7	317.4	292.6	219.1	337.6	261.5	294.3
June	247.6	307.1	318.4	317.3	293.1	219.1	338.3	261.1	295.7
July	247.5	304.4	319.8	316.1	294.0	219.2	339.8	261.4	297.3
Aug	247.7	304.7	321.3	316.2	294.1	219.2	340.8	261.1	298.2
Sept	248.3	303.3	322.0	315.6	294.3	219.0	340.5	255.2	296.7
Oct	246.6	300.3	323.1	316.0	294.8	219.2	340.0	263.8	296.5
Nov	246.1	301.0	324.1	316.4	295.3	220.0	339.6	264.3	296.5
Dec	245.9	303.0	324.1	315.5	295.6	220.1	340.1	263.5	296.7
1985: Jan	246.7	304.4	327.1	315.0	297.0	220.3	341.7	265.2	299.2
Feb	246.4	303.4	327.6	315.6	297.6	220.8	342.6	266.7	300.7
Mar	246.5	303.1	327.7	315.4	297.8	221.1	343.9	266.2	300.6
Apr	246.6	301.5	327.6	316.8	298.1	221.7	345.5	266.2	301.6
May	246.4	306.8	327.3	316.4	298.4	221.7	348.1	267.3	301.4
June	246.2	313.1	327.1	314.9	298.9	221.6	349.3	267.5	301.3
July	245.8	310.1	326.8	314.5	299.2	222.0	349.7	267.7	303.5
Aug [2]	244.8	305.5	326.9	314.7	299.6	222.0	350.3	267.7	303.4
Sept	244.5	300.5	326.9	314.5	299.9	222.3	349.8	254.7	303.2
Oct	245.3	300.1	327.4	314.3	299.8	222.0	350.4	273.5	303.7
Nov	245.2	297.1	327.6	313.5	300.1	222.2	350.8	273.3	304.3
Dec	244.8	297.9	327.5	313.5	300.2	222.4	351.2	272.0	304.6

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[2] Data have been revised through August 1985 to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.

[3] Index for total transportation equipment is not shown but is available beginning December 1968.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-63.—*Changes in producer price indexes for finished goods, 1955–85*

[Percent change]

Year or month	Total finished goods		Finished consumer foods		Finished goods excluding consumer foods						Finished energy goods		Finished goods excluding foods and energy	
					Total		Consumer goods		Capital equipment					
	Dec. to Dec. [1]	Year to year	Dec. to Dec. [1]	Year to year	Dec. to Dec. [1]	Year to year	Dec. to Dec. [1]	Year to year	Dec. to Dec. [1]	Year to year	Dec. to Dec. [1]	Year to year	Dec. to Dec. [1]	Year to yea
1955	1.2	0.2	−2.9	−2.5	…	…	1.7	0.8	5.6	3.0	…	…	…	…
1956	4.2	2.8	3.6	−.2	…	…	2.5	2.4	8.3	7.4	…	…	…	…
1957	3.2	3.6	5.3	3.5	…	…	1.7	2.5	4.3	6.2	…	…	…	…
1958	.5	2.3	.4	5.8	…	…	.2	.1	1.3	2.6	…	…	…	…
1959	−.4	−.2	−3.7	−4.7	…	…	.8	1.3	1.0	1.9	…	…	…	…
1960	1.8	.8	5.2	2.2	…	…	.4	.4	.1	.2	…	…	…	…
1961	−.5	0	−1.8	−.4	…	…	−.3	−.1	.2	.1	…	…	…	…
1962	.1	.3	.5	.9	…	…	−.1	−.2	.3	.4	…	…	…	…
1963	−.2	−.3	−1.3	−1.2	…	…	.1	0	.5	.2	…	…	…	…
1964	.5	.4	.4	.5	…	…	.1	−.1	.9	1.0	…	…	…	…
1965	3.3	1.7	9.1	3.8	…	…	.9	.7	1.5	1.2	…	…	…	…
1966	2.2	3.2	1.4	6.5	…	…	1.7	1.6	3.9	2.5	…	…	…	…
1967	1.6	1.2	−.4	−1.6	…	…	2.1	1.9	3.1	3.3	…	…	…	…
1968	3.1	2.8	4.8	3.6	2.4	2.6	2.0	2.1	3.0	3.5	…	…	…	…
1969	4.8	3.7	8.2	6.2	3.4	2.7	2.9	2.4	4.6	3.3	…	…	…	…
1970	2.2	3.5	−2.5	3.2	4.3	3.5	3.9	3.0	4.9	4.8	…	…	…	…
1971	3.2	3.1	5.9	1.6	2.1	3.7	2.0	3.4	2.4	4.1	…	…	…	…
1972	3.8	3.1	8.0	5.6	2.1	2.0	2.0	1.9	2.0	2.5	…	…	…	…
1973	11.8	9.1	22.5	20.3	6.6	4.1	7.4	4.5	5.3	3.3	…	…	…	…
1974	18.3	15.3	13.0	14.0	21.2	16.0	20.5	16.9	22.6	14.2	…	…	…	…
1975	6.6	10.8	5.5	8.4	7.2	12.1	6.7	10.5	8.2	15.2	16.4	17.3	6.1	11.4
1976	3.7	4.4	−2.5	−.3	6.2	6.3	6.0	6.2	6.4	6.7	11.5	11.8	5.6	5.6
1977	6.9	6.5	6.9	5.3	6.9	7.0	6.7	7.2	7.3	6.5	12.1	15.7	6.3	6.1
1978	9.2	7.8	11.7	9.1	8.3	7.3	8.5	7.1	7.9	7.9	8.5	6.4	8.3	7.5
1979	12.8	11.1	7.4	9.2	14.8	11.9	17.5	13.3	8.8	8.7	58.0	35.1	9.4	9.0
1980	11.8	13.5	7.5	5.9	13.3	16.2	14.2	18.6	11.4	10.8	27.8	49.2	10.7	11.1
1981	7.1	9.2	1.4	5.9	8.8	10.3	8.5	10.2	9.2	10.2	14.1	19.1	7.8	8.6
1982	3.7	4.0	2.1	2.2	4.1	4.6	4.2	4.1	3.9	5.7	−.1	−1.5	4.9	5.7
1983	.6	1.6	2.3	1.0	.0	1.7	−.8	1.3	1.9	2.8	−9.2	−4.8	1.8	3.0
1984	1.7	2.1	3.5	4.4	1.1	1.4	.8	.9	1.8	2.4	−4.1	−4.2	2.1	2.4
1985 [2]	1.8	.9	.3	−.8	2.3	1.5	2.1	1.1	2.7	2.2	.0	−3.9	2.7	2.4

Percent change from preceding month

Year or month	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Seasonally adjusted	Unadjusted	Season ally adjusted
1984 Jan	0.8	0.7	3.0	2.4	0.1	0.1	0	0.1	0.4	0.3	−1.8	−1.0	0.5	0.3
Feb	.4	.3	.9	.2	.2	.3	.2	.3	.2	.4	.5	.8	.2	.2
Mar	.3	.5	.7	1.0	.1	.4	.2	.4	0	.3	.1	−1.1	.2	.7
Apr	−.1	0	−.8	−1.1	.2	.4	−.0	.3	.8	.6	−.9	2.1	.4	.1
May	−.0	−.1	−.9	−.8	.2	.1	.5	.2	−.2	−.2	1.5	.2	.0	.1
June	−.1	0	−.3	0	0	0	0	−.1	0	.1	.3	−1.0	−.0	.2
July	.5	.2	1.7	1.5	.1	−.2	.0	−.3	.2	.2	−1.2	−2.2	.3	.2
Aug	−.3	−.2	−.5	−.3	−.3	−.2	−.4	−.3	0	.2	−1.9	−2.3	.0	.2
Sept	−.6	0	−.4	−.1	−.7	.0	−.7	−.0	−.7	.2	−1.2	−1.0	−.6	.2
Oct	.7	−.1	−.7	−.1	1.2	−.0	1.1	0	1.2	−.2	1.6	1.4	1.1	−.3
Nov	.3	.3	.3	.5	.3	.3	.3	.3	.2	.3	.6	.6	.2	.2
Dec	−.1	0	.6	.4	−.4	−.1	−.4	−.0	−.3	−.3	−1.6	−.6	−.1	−.0
1985 Jan	0	−.0	0	−.5	.1	.1	−.2	−.1	.6	.4	−3.3	−2.6	.6	.6
Feb	.2	.1	.7	.1	−.0	.0	−.3	−.2	.6	.8	−2.8	−2.5	.5	.5
Mar	−.2	.1	−.7	−.4	.0	.3	.0	.3	.0	.3	.2	−.9	0	.5
Apr	.3	.4	−.5	−.9	.6	.8	.8	1.1	.2	.0	3.1	6.1	.2	−.1
May	.3	.2	−1.0	−1.1	.8	.6	1.0	.8	.1	.2	4.4	3.0	.2	.2
June	−.0	−.2	−.3	−.0	0	−.2	0	−.4	.1	.1	−.6	−2.8	.1	.2
July	.3	.3	.9	1.0	.1	.0	.1	0	.1	.1	−1.0	−1.5	.3	.3
Aug [2]	−.4	−.3	−.9	−.8	−.3	−.2	−.5	−.3	.1	.3	−1.9	−1.7	0	.1
Sept	−1.1	−.6	−.8	−.7	−1.2	−.5	−1.0	−.5	−1.5	−.6	−.1	−.2	−1.4	−.6
Oct	1.4	.9	.8	1.4	1.8	.6	1.6	.5	2.5	1.0	.4	.2	2.3	.8
Nov	.6	.8	1.2	1.6	.4	.6	.6	.8	0	.1	2.3	3.1	.1	.1
Dec	.2	.4	.9	.8	−.1	.3	0	.4	−.1	−.1	.4	1.8	−.1	−.0

[1] Changes from December to December are based on unadjusted indexes.

[2] Data have been revised through August 1985 to reflect the availability of late reports and corrections by respondents. All data ar subject to revision 4 months after original publication.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B–64.—*Money stock, liquid assets, and debt measures, 1959–85*

[Averages of daily figures; billions of dollars, seasonally adjusted]

Period	M1	M2	M3	L	Debt[1]	Percent change from year or 6 months earlier[2]			
	Sum of currency, demand deposits, travelers checks, and other checkable deposits (OCDs)	M1 plus overnight RPs and Eurodollars, MMMF balances (general purpose and broker/dealer), MMDAs, and savings and small time deposits	M2 plus large time deposits, term RPs, term Eurodollars, and institution-only MMMF balances	M3 plus other liquid assets	Debt of domestic nonfinancial sectors (monthly average)	M1	M2	M3	Debt
December:									
1959	141.0	297.8	299.8	388.7	638.4	....	....	....	8.4
1960	141.8	312.3	315.3	403.7	673.7	0.6	4.9	5.2	5.5
1961	146.5	335.5	341.0	430.8	716.6	3.3	7.4	8.2	6.4
1962	149.2	362.7	371.4	466.1	769.5	1.8	8.1	8.9	7.4
1963	154.7	393.2	406.0	503.8	825.5	3.7	8.4	9.3	7.3
1964	161.9	424.8	442.5	540.4	889.1	4.7	8.0	9.0	7.7
1965	169.5	459.4	482.2	584.5	957.8	4.7	8.1	9.0	7.7
1966	173.7	480.0	505.1	614.8	1,025.1	2.5	4.5	4.7	7.0
1967	185.1	524.3	557.1	666.6	1,102.2	6.6	9.2	10.3	7.5
1968	199.4	566.3	606.2	728.9	1,197.5	7.7	8.0	8.8	8.6
1969	205.8	589.5	615.0	763.6	1,285.5	3.2	4.1	1.5	7.3
1970	216.6	628.2	677.5	816.4	1,375.6	5.2	6.6	10.2	7.0
1971	230.8	712.8	776.2	903.2	1,510.5	6.6	13.5	14.6	9.8
1972	252.0	805.2	886.0	1,023.1	1,670.3	9.2	13.0	14.1	10.6
1973	265.9	861.0	985.0	1,141.8	1,861.4	5.5	6.9	11.2	11.4
1974	277.5	908.4	1,070.4	1,249.2	2,036.9	4.4	5.5	8.7	9.4
1975	291.1	1,023.1	1,172.2	1,367.6	2,225.8	4.9	12.6	9.5	9.3
1976	310.3	1,163.6	1,311.8	1,516.5	2,468.3	6.6	13.7	11.9	10.9
1977	335.3	1,286.6	1,472.5	1,704.3	2,784.1	8.1	10.6	12.3	12.8
1978	363.0	1,388.9	1,646.4	1,909.7	3,157.0	8.3	8.0	11.8	13.4
1979	389.0	1,497.9	1,803.6	2,115.8	3,543.5	7.2	7.8	9.5	12.2
1980	414.8	1,631.4	1,988.5	2,324.8	3,881.7	6.6	8.9	10.3	9.5
1981	441.8	1,794.4	2,235.8	2,596.6	4,255.7	6.5	10.0	12.4	9.6
1982	480.8	1,954.9	2,446.8	2,854.8	4,649.8	8.8	8.9	9.4	9.3
1983	528.0	2,188.8	2,701.7	3,168.9	5,177.1	9.8	12.0	10.4	11.3
1984	558.5	2,371.7	2,995.0	3,541.3	5,927.0	5.8	8.4	10.9	14.5
1985 p	624.7	2,563.6	3,213.5	....	....	11.9	8.1	7.3	....
1985: Jan	562.7	2,398.9	3,020.5	3,564.0	5,992.6	5.9	10.7	11.4	14.8
Feb	569.4	2,421.0	3,041.0	3,595.5	6,048.2	7.6	11.5	11.6	14.3
Mar	572.1	2,429.6	3,055.9	3,623.3	6,103.8	7.6	10.8	11.0	14.2
Apr	574.9	2,427.7	3,056.9	3,625.9	6,165.4	9.9	9.6	9.2	14.0
May	581.6	2,444.9	3,076.9	3,644.5	6,228.6	10.3	8.6	8.1	13.3
June	591.2	2,472.9	3,104.5	3,675.1	6,290.8	12.1	8.7	7.4	12.7
July	595.8	2,490.6	3,117.2	3,694.6	6,356.0	12.1	7.8	6.5	12.5
Aug	605.9	2,514.1	3,142.6	3,732.9	6,419.7	13.2	7.8	6.8	12.7
Sept	611.9	2,528.9	3,169.3	3,766.7	6,479.2	14.4	8.3	7.6	12.7
Oct	611.1	2,533.0	3,179.7	3,781.7	6,542.1	13.0	8.9	8.2	12.6
Nov p	617.9	2,547.1	3,194.7	3,816.8	6,626.0	12.9	8.5	7.8	13.2
Dec p	624.7	2,563.6	3,213.5	....	....	11.7	7.5	7.1	....

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[1] Consists of outstanding credit market debt of the U.S. Government, State and local government and private nonfinancial sectors; data from flow of funds accounts.

[2] Annual changes are from December to December, and monthly changes are from 6 months earlier at an annual rate.

Note.—The nontransactions portion of M2 is seasonally adjusted as a whole to reduce distortions caused by substantial portfolio shifts arising from regulatory and financial changes in recent years, especially shifts to MMDAs in 1983. A similar procedure is used to seasonally adjust the remaining nontransactions balances in M3. See Table B–65 for components.

Source: Board of Governors of the Federal Reserve System.

TABLE B–65.—*Components of money stock measures and liquid assets, 1959–85*

[Averages of daily figures; billions of dollars, seasonally adjusted, except as noted]

Period	Currency	Travelers checks	Demand deposits	Other checkable deposits (OCDs)	Overnight repurchase agreements (RPs) net, plus overnight Eurodollars NSA	Money market mutual fund (MMMF) balances		Money market deposit accounts (MMDAs) NSA	Savings deposits
						General purpose and broker/dealer NSA	Institution only NSA		
December:									
1959	29.0	0.4	111.6	0.0	0.0	0.0	0.0	0.0	146.4
1960	28.9	.4	112.5	.0	.0	.0	.0	.0	159.1
1961	29.5	.4	116.5	.0	.0	.0	.0	.0	175.5
1962	30.6	.4	118.2	.0	.0	.0	.0	.0	194.8
1963	32.5	.5	121.7	.1	.0	.0	.0	.0	214.4
1964	34.3	.5	127.0	.1	.0	.0	.0	.0	235.2
1965	36.3	.6	132.5	.1	.0	.0	.0	.0	256.9
1966	38.3	.6	134.6	.1	.0	.0	.0	.0	253.1
1967	40.4	.7	143.9	.1	.0	.0	.0	.0	263.7
1968	43.4	.8	155.1	.1	.0	.0	.0	.0	268.9
1969	46.1	.8	158.8	.1	2.2	.0	.0	.0	263.7
1970	49.2	1.0	166.3	.1	1.3	.0	.0	.0	261.0
1971	52.6	1.1	176.9	.2	2.3	.0	.0	.0	292.2
1972	56.8	1.3	193.7	.2	2.8	.0	.0	.0	321.4
1973	61.6	1.5	202.4	.3	5.3	.1	.0	.0	326.7
1974	67.9	1.8	207.4	.4	5.6	1.7	.2	.0	338.5
1975	73.8	2.3	214.1	.9	5.8	2.7	.4	.0	388.8
1976	80.6	2.8	224.3	2.7	10.6	2.4	.6	.0	453.2
1977	88.6	3.1	239.4	4.2	14.7	2.4	.9	.0	492.1
1978	97.6	3.5	253.4	8.5	20.3	6.4	3.1	.0	481.7
1979	106.4	3.8	261.3	17.5	21.2	33.4	9.5	.0	423.3
1980	116.7	4.2	265.7	28.2	28.3	61.6	15.2	.0	400.8
1981	124.0	4.4	235.2	78.2	35.9	150.6	38.0	.0	344.4
1982	134.3	4.3	238.6	103.5	38.8	185.2	51.1	43.2	357.8
1983	148.4	4.9	243.5	131.3	53.8	138.2	43.2	379.2	307.0
1984	158.7	5.2	248.6	146.0	57.6	167.5	62.7	415.1	288.6
1985 ^{p}	170.8	5.9	270.8	177.2	72.9	175.8	64.5	509.0	305.0
1984: Jan	149.4	4.9	244.3	132.7	56.1	137.8	43.5	384.0	305.1
Feb	150.2	5.0	245.2	133.8	57.3	142.1	44.6	390.0	303.8
Mar	151.2	5.0	245.5	135.6	56.6	144.8	45.0	396.9	302.9
Apr	152.1	5.1	245.9	136.1	56.3	145.9	45.0	401.0	301.9
May	152.8	5.1	246.3	138.3	58.3	146.5	45.3	399.4	301.5
June	154.3	5.1	248.9	139.0	55.9	148.9	45.7	397.8	300.8
July	155.0	5.2	247.3	139.4	56.3	150.5	46.1	394.2	299.1
Aug	155.9	5.2	246.8	141.0	58.5	150.6	46.2	388.9	296.5
Sept	156.8	5.1	247.5	142.2	56.7	152.1	46.9	388.6	294.6
Oct	157.1	5.0	244.5	141.8	56.8	155.6	52.2	392.0	292.6
Nov	157.9	5.1	246.8	143.9	58.0	162.0	58.3	402.4	290.7
Dec	158.7	5.2	248.6	146.0	57.6	167.5	62.7	415.1	288.6
1985: Jan	159.4	5.3	249.1	149.0	62.9	171.9	65.0	433.7	288.6
Feb	160.5	5.3	251.7	151.8	69.6	175.1	62.2	448.3	289.4
Mar	161.3	5.4	251.9	153.6	68.1	177.6	59.5	457.9	288.6
Apr	161.7	5.5	252.5	155.3	59.4	176.2	59.6	460.3	287.8
May	163.1	5.5	255.8	157.3	64.1	172.2	63.5	463.8	289.3
June	164.5	5.7	260.7	160.3	63.0	175.4	67.1	475.1	292.1
July	165.4	5.9	260.9	163.6	62.6	175.8	65.0	484.1	296.0
Aug	167.1	5.9	264.1	168.9	66.1	176.8	63.6	492.1	300.3
Sept	167.9	5.9	266.8	171.3	66.6	176.7	62.3	496.7	301.7
Oct	168.8	5.9	264.0	172.4	67.1	177.0	63.3	501.1	304.3
Nov ^{p}	170.0	5.9	266.3	175.7	68.8	176.5	64.5	506.5	305.8
Dec ^{p}	170.8	5.9	270.8	177.2	72.9	175.8	64.5	509.0	305.0

See next page for continuation of table.

TABLE B-65.—*Components of money stock measures and liquid assets, 1959–85*—Continued

[Averages of daily figures; billions of dollars, seasonally adjusted, except as noted]

Period	Small denomination time deposits [1]	Large denomination time deposits [1]	Term repurchase agreements (RPs) NSA	Term Eurodollars NSA	Savings bonds	Short-term Treasury securities	Bankers acceptances	Commercial paper
December:								
1959	11.4	1.2	0.0	0.7	46.1	38.6	0.6	3.6
1960	12.5	2.0	.0	.8	45.7	36.8	.9	5.1
1961	14.8	3.9	.0	1.4	46.5	37.0	1.1	5.2
1962	20.1	7.0	.0	1.6	46.9	39.9	1.1	6.8
1963	25.5	10.8	.0	1.9	48.1	40.7	1.2	7.7
1964	29.2	15.2	.0	2.4	49.0	38.5	1.3	9.1
1965	34.5	21.2	.0	1.7	49.6	40.8	1.6	10.2
1966	55.0	23.1	.0	2.1	50.2	43.3	1.8	14.4
1967	77.8	30.9	.0	2.1	51.2	38.8	1.8	17.8
1968	100.5	37.4	.0	2.9	51.8	46.2	2.3	22.5
1969	120.4	20.4	2.6	2.7	51.7	59.5	3.3	34.0
1970	151.1	45.2	1.6	2.2	52.0	48.9	3.5	34.5
1971	189.7	57.7	2.7	2.7	54.3	36.1	3.8	32.7
1972	231.6	73.3	3.5	3.6	57.6	40.8	3.5	35.2
1973	265.8	111.1	6.8	5.4	60.4	49.5	5.0	41.9
1974	287.9	144.8	7.9	8.0	63.3	52.9	12.6	50.1
1975	337.9	129.7	8.2	9.7	67.2	69.5	10.7	48.0
1976	390.8	118.1	14.0	14.8	71.8	70.4	10.8	51.7
1977	445.6	145.0	19.1	20.2	76.4	78.3	14.1	62.9
1978	521.2	195.1	26.6	31.8	80.3	81.9	22.0	79.0
1979	634.6	222.0	29.5	44.7	79.6	108.4	27.2	97.0
1980	729.0	258.9	34.0	50.3	72.3	133.9	32.0	98.1
1981	823.6	302.1	36.0	67.5	67.8	150.4	39.7	102.8
1982	851.5	328.3	34.5	81.7	67.9	186.2	43.9	107.0
1983	784.6	330.8	51.8	91.5	71.1	216.3	44.1	135.2
1984	885.6	416.2	69.7	83.2	74.1	267.2	43.2	161.8
1985 p	878.3	441.1	76.4	76.8	....	....	....	....
984: Jan	790.3	336.1	50.1	89.0	71.4	220.5	43.3	134.9
Feb	796.2	343.0	51.4	89.4	71.8	222.8	42.9	138.1
Mar	802.3	349.7	53.5	93.2	72.1	230.7	44.0	142.9
Apr	811.2	357.7	57.3	92.1	72.5	235.4	44.7	146.1
May	822.6	369.8	59.5	93.0	72.7	235.7	46.5	152.0
June	834.0	379.5	59.2	89.3	73.0	244.8	47.7	155.5
July	843.6	389.3	60.0	88.3	73.1	252.1	48.2	159.4
Aug	855.0	392.6	64.1	86.5	73.3	261.1	47.8	160.5
Sept	864.5	396.0	66.6	85.6	73.6	273.5	46.8	157.2
Oct	872.7	405.2	69.3	80.6	73.7	273.1	44.8	156.7
Nov	878.5	410.7	70.7	81.9	73.9	268.0	43.4	157.6
Dec	885.6	416.2	69.7	83.2	74.1	267.2	43.2	161.8
985: Jan	881.9	416.9	65.0	81.1	74.4	266.6	42.8	159.6
Feb	877.6	419.3	65.7	81.3	74.9	270.2	44.6	164.8
Mar	878.6	423.6	68.9	84.7	75.3	275.9	46.4	169.8
Apr	885.3	427.3	71.9	81.0	75.8	278.2	46.1	168.9
May	892.0	428.2	68.8	81.8	76.2	277.9	44.8	168.6
June	894.2	424.1	66.9	79.9	76.6	286.5	42.8	164.7
July	888.5	420.0	65.0	79.4	76.7	286.9	42.7	171.1
Aug	878.4	421.4	67.6	80.2	77.2	288.1	42.9	182.0
Sept	874.4	428.6	70.7	80.8	78.1	290.0	42.9	186.6
Oct	871.6	433.3	70.6	80.3	78.5	288.2	43.6	191.7
Nov p	871.7	437.7	74.3	79.7	78.9	303.3	42.5	197.4
Dec p	878.3	441.1	76.4	76.8	....	....	....	....

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[1] Small denomination and large denomination deposits are those issued in amounts of less than $100,000 and more than $100,000, spectively.

Note.—NSA indicates data are not seasonally adjusted.
See also Table B-64.

Source: Board of Governors of the Federal Reserve System.

TABLE B-66.—*Aggregate reserves of depository institutions and monetary base, 1959–85*

[Averages of daily figures; millions of dollars; seasonally adjusted, except as noted]

Year and month	Adjusted for changes in reserve requirements [1]					Borrowings of depository institutions from the Federal Reserve, NSA		
	Reserves of depository institutions				Monetary base			
	Total	Nonborrowed	Nonborrowed plus extended credit	Required		Total	Seasonal	Extended credit
1959: Dec	13,695	12,754	12,754	13,189	43,425	941	....	....
1960: Dec	13,863	13,789	13,789	13,120	43,408	74	....	....
1961: Dec	14,293	14,160	14,160	13,709	44,437	133	....	....
1962: Dec	14,556	14,296	14,296	13,985	45,683	260	....	....
1963: Dec	14,856	14,524	14,524	14,366	47,935	332	....	....
1964: Dec	15,336	15,072	15,072	14,930	50,285	264	....	....
1965: Dec	15,881	15,437	15,437	15,458	52,961	444	....	....
1966: Dec	15,875	15,342	15,342	15,536	55,036	532	....	....
1967: Dec	17,279	17,051	17,051	16,904	58,453	228	....	....
1968: Dec	18,181	17,435	17,435	17,755	62,533	746	....	....
1969: Dec	18,471	17,352	17,352	18,185	65,678	1,119	....	....
1970: Dec	19,356	19,023	19,023	19,107	69,685	332	....	....
1971: Dec	20,594	20,468	20,468	20,412	74,377	126	....	....
1972: Dec	22,663	21,613	21,613	22,379	80,921	1,050	....	....
1973: Dec	23,671	22,373	22,373	23,368	87,436	1,298	41	....
1974: Dec	24,904	24,176	24,323	24,645	94,629	727	32	147
1975: Dec	25,044	24,914	24,926	24,778	100,771	130	14	12
1976: Dec	25,596	25,543	25,543	25,322	108,347	53	13	....
1977: Dec	26,627	26,057	26,057	26,437	117,461	569	55	....
1978: Dec	27,906	27,038	27,038	27,674	128,043	868	135	....
1979: Dec	29,200	27,728	27,728	28,759	139,016	1,473	81	....
1980: Dec	31,038	29,348	29,351	30,524	150,342	1,690	116	3
1981: Dec	32,096	31,460	31,608	31,777	158,097	636	54	148
1982: Dec	34,283	33,649	33,835	33,783	170,145	634	33	186
1983: Dec	36,138	35,364	35,366	35,578	185,485	774	96	2
1984: Dec	39,081	35,895	38,499	38,229	199,032	3,186	113	2,604
1985: Dec ᵖ	45,186	43,867	44,367	44,128	216,935	1,318	56	499
1984: Jan	36,357	35,642	35,646	35,744	187,484	715	86	4
Feb	37,093	36,526	36,531	36,150	188,938	567	103	5
Mar	37,019	36,068	36,095	36,308	189,828	952	133	27
Apr	36,973	35,739	35,784	36,482	190,515	1,234	139	44
May	37,397	34,409	34,446	36,818	191,715	2,988	196	37
June	37,986	34,686	36,558	37,212	193,659	3,300	264	1,873
July	38,050	32,126	37,134	37,437	194,460	5,924	308	5,008
Aug	38,284	30,268	37,311	37,595	195,568	8,017	346	7,043
Sept	38,086	30,844	37,303	37,458	196,206	7,242	319	6,459
Oct	37,961	31,944	37,001	37,341	196,397	6,017	299	5,057
Nov	38,466	33,849	37,686	37,773	197,672	4,617	212	3,837
Dec	39,081	35,895	38,499	38,229	199,032	3,186	113	2,604
1985: Jan	39,635	38,240	39,290	38,890	200,206	1,395	62	1,050
Feb	40,432	39,143	39,947	39,529	202,049	1,289	71	803
Mar	40,471	38,878	39,937	39,705	202,945	1,593	88	1,059
Apr	40,710	39,387	40,256	39,972	203,562	1,323	135	868
May	41,323	39,989	40,522	40,519	205,355	1,334	165	534
June	42,177	40,972	41,638	41,272	207,658	1,205	151	665
July	42,606	41,500	42,006	41,751	208,831	1,107	167	507
Aug	43,193	42,121	42,690	42,366	211,154	1,073	221	570
Sept	43,507	42,218	42,874	42,841	212,384	1,289	203	656
Oct	43,651	42,464	43,093	42,898	213,456	1,187	172	629
Nov	44,377	42,636	43,167	43,449	215,255	1,741	107	530
Dec ᵖ	45,186	43,867	44,367	44,128	216,935	1,318	56	499

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[1] Aggregate reserves incorporate adjustments for discontinuities associated with the implementation of the Monetary Control Act and other regulatory changes to reserve requirements. For details on aggregate reserves series see Federal Reserve *Bulletin*.

Source: Board of Governors of the Federal Reserve System.

TABLE B–67.—*Commercial bank loans and securities, 1972–85*

[Monthly average, billions of dollars, seasonally adjusted [1]]

Year and month	Total loans and securities	Loans and leases			Other securities
		Total	Commercial and industrial	U.S. Government securities	
1972: Dec	572.0	390.0	137.1	88.6	93.4
1973: Dec	647.8	460.1	165.0	88.2	99.4
1974: Dec	713.7	519.8	196.6	86.3	107.5
1975: Dec	745.1	517.1	189.3	116.7	111.2
1976: Dec	804.6	554.8	190.9	136.3	113.5
1977: Dec	891.4	632.2	211.0	136.6	122.7
1978: Dec	1,013.8	746.9	246.1	137.6	129.2
1979: Dec	1,135.4	849.1	291.1	144.4	141.9
1980: Dec	1,239.7	914.5	326.9	170.9	154.4
1981: Dec	1,307.4	967.4	355.1	179.6	160.4
1982: Dec	1,400.5	1,032.8	391.5	202.7	165.0
1983: Dec	1,553.0	1,122.7	412.8	260.8	169.6
1984: Dec	1,716.8	1,316.5	469.0	260.3	140.0
1985: Dec [p]	1,895.5	1,450.3	493.9	270.7	174.5
1984: Jan	1,565.0	1,160.9	414.1	260.4	143.7
Feb	1,584.2	1,181.3	421.8	260.7	142.2
Mar	1,599.8	1,196.5	432.2	261.0	142.3
Apr	1,613.2	1,213.5	438.5	257.6	142.1
May	1,630.1	1,232.3	448.1	257.4	140.5
June	1,637.0	1,243.6	452.3	253.7	139.7
July	1,653.2	1,257.2	455.1	256.4	139.5
Aug	1,662.9	1,264.9	458.2	257.2	140.8
Sept	[2] 1,675.8	[2] 1,275.7	[2] 460.2	258.1	141.9
Oct	1,684.1	1,285.5	463.2	257.1	141.5
Nov	1,702.8	1,302.1	467.6	259.5	141.2
Dec	1,716.8	1,316.5	469.0	260.3	140.0
1985: Jan	1,726.3	1,323.4	469.2	260.3	142.6
Feb	1,744.8	1,337.7	474.2	266.0	141.1
Mar	1,761.6	1,355.6	481.2	267.1	138.9
Apr	1,768.8	1,367.1	481.9	261.4	140.2
May	1,788.5	1,380.0	484.3	266.3	142.2
June	1,802.7	1,391.0	484.3	267.1	144.5
July	1,819.0	1,402.1	484.1	271.6	145.4
Aug	1,828.8	1,409.2	485.7	271.4	148.2
Sept	1,841.3	1,416.9	487.2	273.1	151.3
Oct	1,844.4	1,419.7	487.0	270.0	154.8
Nov	1,869.6	1,433.9	490.6	275.0	160.7
Dec [p]	1,895.5	1,450.3	493.9	270.7	174.5

[1] Data are prorated averages of Wednesday figures for domestically chartered banks and averages of current and previous month-end data for foreign-related institutions. Lease financing receivables are included in total loans and investments and in total loans.

[2] Beginning September 26, 1984, a transfer of loans from Continental Illinois National Bank to the Federal Deposit Insurance Corporation reduced total loans and investments and total loans by $1.9 billion, commercial and industrial loans by $1.4 billion, and real estate loans (not shown here) by $0.4 billion.

Note.—Data are not strictly comparable because of breaks in the series.

Source: Board of Governors of the Federal Reserve System.

TABLE B–68.—*Bond yields and interest rates, 1929–85*

[Percent per annum]

Year and month	U.S. Treasury securities				Corporate bonds (Moody's)		High-grade municipal bonds (Standard & Poor's)	New-home mortgage yields (FHLBB) [4]	Commercial paper, 6 months [5]	Prime rate charged by banks [6]	Discount rate, Federal Reserve Bank of New York [6]	Federal funds rate [7]
	Bills (new issues) [1]		Constant maturities [2]									
	3-month	6-month	3-year	10-year	Aaa [3]	Baa						
1929	...	...	...	...	4.73	5.90	4.27	...	5.85	5.50–6.00	5.16	...
1933	0.515	...	...	...	4.49	7.76	4.71	...	1.73	1.50–4.00	2.56	...
1939	.023	...	...	...	3.01	4.96	2.76	...	.59	1.50	1.00	...
1940	.014	...	...	...	2.84	4.75	2.50	...	.56	1.50	1.00	...
1941	.103	...	...	...	2.77	4.33	2.10	...	.53	1.50	1.00	...
1942	.326	...	...	...	2.83	4.28	2.36	...	.66	1.50	[8] 1.00	...
1943	.373	...	...	...	2.73	3.91	2.06	...	.69	1.50	[8] 1.00	...
1944	.375	...	...	...	2.72	3.61	1.86	...	.73	1.50	[8] 1.00	...
1945	.375	...	...	...	2.62	3.29	1.67	...	.75	1.50	[8] 1.00	...
1946	.375	...	...	...	2.53	3.05	1.64	...	.81	1.50	[8] 1.00	...
1947	.594	...	...	...	2.61	3.24	2.01	...	1.03	1.50–1.75	1.00	...
1948	1.040	...	...	...	2.82	3.47	2.40	...	1.44	1.75–2.00	1.34	...
1949	1.102	...	...	...	2.66	3.42	2.21	...	1.49	2.00	1.50	...
1950	1.218	...	...	...	2.62	3.24	1.98	...	1.45	2.07	1.59	...
1951	1.552	...	...	...	2.86	3.41	2.00	...	2.16	2.56	1.75	...
1952	1.766	...	...	...	2.96	3.52	2.19	...	2.33	3.00	1.75	...
1953	1.931	...	2.47	2.85	3.20	3.74	2.72	...	2.52	3.17	1.99	...
1954	.953	...	1.63	2.40	2.90	3.51	2.37	...	1.58	3.05	1.60	...
1955	1.753	...	2.47	2.82	3.06	3.53	2.53	...	2.18	3.16	1.89	1.78
1956	2.658	...	3.19	3.18	3.36	3.88	2.93	...	3.31	3.77	2.77	2.73
1957	3.267	...	3.98	3.65	3.89	4.71	3.60	...	3.81	4.20	3.12	3.11
1958	1.839	...	2.84	3.32	3.79	4.73	3.56	...	2.46	3.83	2.15	1.57
1959	3.405	3.832	4.46	4.33	4.38	5.05	3.95	...	3.97	4.48	3.36	3.30
1960	2.928	3.247	3.98	4.12	4.41	5.19	3.73	...	3.85	4.82	3.53	3.22
1961	2.378	2.605	3.54	3.88	4.35	5.08	3.46	...	2.97	4.50	3.00	1.96
1962	2.778	2.908	3.47	3.95	4.33	5.02	3.18	...	3.26	4.50	3.00	2.68
1963	3.157	3.253	3.67	4.00	4.26	4.86	3.23	5.89	3.55	4.50	3.23	3.18
1964	3.549	3.686	4.03	4.19	4.40	4.83	3.22	5.82	3.97	4.50	3.55	3.50
1965	3.954	4.055	4.22	4.28	4.49	4.87	3.27	5.81	4.38	4.54	4.04	4.07
1966	4.881	5.082	5.23	4.92	5.13	5.67	3.82	6.25	5.55	5.63	4.50	5.11
1967	4.321	4.630	5.03	5.07	5.51	6.23	3.98	6.46	5.10	5.61	4.19	4.22
1968	5.339	5.470	5.68	5.65	6.18	6.94	4.51	6.97	5.90	6.30	5.16	5.66
1969	6.677	6.853	7.02	6.67	7.03	7.81	5.81	7.80	7.83	7.96	5.87	8.20
1970	6.458	6.562	7.29	7.35	8.04	9.11	6.51	8.45	7.71	7.91	5.95	7.18
1971	4.348	4.511	5.65	6.16	7.39	8.56	5.70	7.74	5.11	5.72	4.88	4.66
1972	4.071	4.466	5.72	6.21	7.21	8.16	5.27	7.60	4.73	5.25	4.50	4.43
1973	7.041	7.178	6.95	6.84	7.44	8.24	5.18	7.96	8.15	8.03	6.44	8.73
1974	7.886	7.926	7.82	7.56	8.57	9.50	6.09	8.92	9.84	10.81	7.83	10.50
1975	5.838	6.122	7.49	7.99	8.83	10.61	6.89	9.00	6.32	7.86	6.25	5.82
1976	4.989	5.266	6.77	7.61	8.43	9.75	6.49	9.00	5.34	6.84	5.50	5.04
1977	5.265	5.510	6.69	7.42	8.02	8.97	5.56	9.02	5.61	6.83	5.46	5.54
1978	7.221	7.572	8.29	8.41	8.73	9.49	5.90	9.56	7.99	9.06	7.46	7.93
1979	10.041	10.017	9.71	9.44	9.63	10.69	6.39	10.78	10.91	12.67	10.28	11.19
1980	11.506	11.374	11.55	11.46	11.94	13.67	8.51	12.66	12.29	15.27	11.77	13.36
1981	14.029	13.776	14.44	13.91	14.17	16.04	11.23	14.70	14.76	18.87	13.42	16.38
1982	10.686	11.084	12.92	13.00	13.79	16.11	11.57	15.14	11.89	14.86	11.02	12.26
1983	8.63	8.75	10.45	11.10	12.04	13.55	9.47	12.57	8.89	10.79	8.50	9.09
1984	9.58	9.80	11.89	12.44	12.71	14.19	10.15	12.38	10.16	12.04	8.80	10.23
1985	7.48	7.66	9.64	10.62	11.37	12.72	9.18	...	8.01	9.93	7.69	8.10
										High-low	High-low	
1980:												
Jan	12.036	11.851	10.88	10.80	11.09	12.42	7.21	11.87	12.66	15.25–15.25	12.00–12.00	13.82
Feb	12.814	12.721	12.84	12.41	12.38	13.57	8.04	11.93	13.60	16.75–15.25	13.00–12.00	14.13
Mar	15.526	15.100	14.05	12.75	12.96	14.45	9.09	12.62	16.50	19.50–16.75	13.00–13.00	17.19
Apr	14.003	13.618	12.02	11.47	12.04	14.19	8.40	13.03	14.93	20.00–19.50	13.00–13.00	17.61
May	9.150	9.149	9.44	10.18	10.99	13.17	7.37	13.68	9.29	19.00–14.00	13.00–12.00	10.98
June	6.995	7.218	8.91	9.78	10.58	12.71	7.60	12.66	8.03	14.00–12.00	12.00–11.00	9.47
July	8.126	8.101	9.27	10.25	11.07	12.65	8.08	12.48	8.29	12.00–11.00	11.00–10.00	9.03
Aug	9.259	9.443	10.63	11.10	11.64	13.15	8.62	12.25	9.61	11.50–11.00	10.00–10.00	9.61
Sept	10.321	10.546	11.57	11.51	12.02	13.70	8.95	12.35	11.04	13.00–11.50	11.00–10.00	10.87
Oct	11.580	11.566	12.01	11.75	12.31	14.23	9.11	12.61	12.32	14.50–13.50	11.00–11.00	12.81
Nov	13.888	13.612	13.31	12.68	12.97	14.64	9.55	13.04	14.73	17.75–14.50	12.00–11.00	15.85
Dec	15.661	14.770	13.65	12.84	13.21	15.14	10.09	13.28	16.49	21.50–17.75	13.00–12.00	18.90

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[1] Rate on new issues within period; bank-discount basis.

[2] Yields on the more actively traded issues adjusted to constant maturities by the Treasury Department.

[3] Series excludes public utility issues for January 17, 1984 through October 11, 1984 due to lack of appropriate issues.

[4] Effective rate (in the primary market) on conventional mortgages, reflecting fees and charges as well as contract rate and assuming, on the average, repayment at end of 10 years. Rates beginning January 1973 not strictly comparable with prior rates.

See next page for continuation of table.

TABLE B–68.—*Bond yields and interest rates, 1929–85*—Continued

[Percent per annum]

Year and month	U.S. Treasury securities				Corporate bonds (Moody's)		High-grade municipal bonds (Standard & Poor's)	New-home mortgage yields (FHLBB) [4]	Commercial paper, 6 months [5]	Prime rate charged by banks [6]	Discount rate, Federal Reserve Bank of New York [6]	Federal funds rate [7]
	Bills (new issues) [1]		Constant maturities [2]									
	3-month	6-month	3-year	10-year	Aaa [3]	Baa						
										High-low	High-low	
1981:												
Jan	14.724	13.883	13.01	12.57	12.81	15.03	9.65	13.26	15.10	21.50–20.00	13.00–13.00	19.08
Feb	14.905	14.134	13.65	13.19	13.35	15.37	10.03	13.54	14.87	20.00–19.00	13.00–13.00	15.93
Mar	13.478	12.983	13.51	13.12	13.33	15.34	10.12	14.02	13.59	19.00–17.50	13.00–13.00	14.70
Apr	13.635	13.434	14.09	13.68	13.88	15.56	10.55	14.15	14.17	18.00–17.00	13.00–13.00	15.72
May	16.295	15.334	15.08	14.10	14.32	15.95	10.73	14.10	16.66	20.50–18.00	14.00–13.00	18.52
June	14.557	13.947	14.29	13.47	13.75	15.80	10.56	14.67	15.22	20.50–20.00	14.00–14.00	19.10
July	14.699	14.402	15.15	14.28	14.38	16.17	11.03	14.72	16.09	20.50–20.00	14.00–14.00	19.04
Aug	15.612	15.548	16.00	14.94	14.89	16.34	12.13	15.27	16.62	20.50–20.50	14.00–14.00	17.82
Sept	14.951	15.057	16.22	15.32	15.49	16.92	12.86	15.29	15.93	20.50–19.50	14.00–14.00	15.87
Oct	13.873	14.013	15.50	15.15	15.40	17.11	12.67	15.65	14.72	19.50–18.00	14.00–14.00	15.08
Nov	11.269	11.530	13.11	13.39	14.22	16.39	11.71	16.38	11.96	18.00–16.00	14.00–13.00	13.31
Dec	10.926	11.471	13.66	13.72	14.23	16.55	12.77	15.87	12.14	15.75–15.75	13.00–12.00	12.37
1982:												
Jan	12.412	12.930	14.64	14.59	15.18	17.10	13.16	15.25	13.35	15.75–15.75	12.00–12.00	13.22
Feb	13.780	13.709	14.73	14.43	15.27	17.18	12.81	15.12	14.27	17.00–15.75	12.00–12.00	14.78
Mar	12.493	12.621	14.13	13.86	14.58	16.82	12.72	15.67	13.47	16.50–16.50	12.00–12.00	14.68
Apr	12.821	12.861	14.18	13.87	14.46	16.78	12.45	15.84	13.64	16.50–16.50	12.00–12.00	14.94
May	12.148	12.220	13.77	13.62	14.26	16.64	11.99	15.89	13.02	16.50–16.50	12.00–12.00	14.45
June	12.108	12.310	14.48	14.30	14.81	16.92	12.42	15.40	13.79	16.50–16.50	12.00–12.00	14.15
July	11.914	12.236	14.00	13.95	14.61	16.80	12.11	15.70	13.00	16.50–15.50	12.00–11.50	12.59
Aug	9.006	10.105	12.62	13.06	13.71	16.32	11.12	15.68	10.80	15.50–13.50	11.50–10.00	10.12
Sept	8.196	9.539	12.03	12.34	12.94	15.63	10.61	14.98	10.86	13.50–13.50	10.00–10.00	10.31
Oct	7.750	8.299	10.62	10.91	12.12	14.73	9.59	14.41	9.21	13.50–12.00	10.00–9.50	9.71
Nov	8.042	8.319	9.98	10.55	11.68	14.30	9.97	13.81	8.72	12.00–11.50	9.50–9.00	9.20
Dec	8.013	8.225	9.88	10.54	11.83	14.14	9.91	13.69	8.50	11.50–11.50	9.00–8.50	8.95
1983:												
Jan	7.810	7.898	9.64	10.46	11.79	13.94	9.45	13.49	8.15	11.50–11.00	8.50–8.50	8.68
Feb	8.130	8.233	9.91	10.72	12.01	13.95	9.48	13.16	8.39	11.00–10.50	8.50–8.50	8.51
Mar	8.304	8.325	9.84	10.51	11.73	13.61	9.16	13.41	8.48	10.50–10.50	8.50–8.50	8.77
Apr	8.252	8.343	9.76	10.40	11.51	13.29	8.96	12.42	8.48	10.50–10.50	8.50–8.50	8.80
May	8.19	8.20	9.66	10.38	11.46	13.09	9.03	12.67	8.31	10.50–10.50	8.50–8.50	8.63
June	8.82	8.89	10.32	10.85	11.74	13.37	9.51	12.36	9.03	10.50–10.50	8.50–8.50	8.98
July	9.12	9.29	10.90	11.38	12.15	13.39	9.46	12.50	9.36	10.50–10.50	8.50–8.50	9.37
Aug	9.39	9.53	11.30	11.85	12.51	13.64	9.72	12.38	9.68	11.00–10.50	8.50–8.50	9.56
Sept	9.05	9.19	11.07	11.65	12.37	13.55	9.57	12.54	9.28	11.00–11.00	8.50–8.50	9.45
Oct	8.71	8.90	10.87	11.54	12.25	13.46	9.64	12.25	8.98	11.00–11.00	8.50–8.50	9.48
Nov	8.71	8.89	10.96	11.69	12.41	13.61	9.79	12.34	9.09	11.00–11.00	8.50–8.50	9.34
Dec	8.96	9.14	11.13	11.83	12.57	13.75	9.90	12.42	9.50	11.00–11.00	8.50–8.50	9.47
1984:												
Jan	8.93	9.06	10.93	11.67	12.20	13.65	9.61	12.29	9.18	11.00–11.00	8.50–8.50	9.56
Feb	9.03	9.13	11.05	11.84	12.08	13.59	9.63	12.23	9.31	11.00–11.00	8.50–8.50	9.59
Mar	9.44	9.58	11.59	12.32	12.57	13.99	9.92	12.02	9.86	11.50–11.00	8.50–8.50	9.91
Apr	9.69	9.83	11.98	12.63	12.81	14.31	9.98	12.04	10.22	12.00–11.50	9.00–8.50	10.29
May	9.90	10.31	12.75	13.41	13.28	14.74	10.55	12.18	10.87	12.50–12.00	9.00–9.00	10.32
June	9.94	10.55	13.18	13.56	13.55	15.05	10.71	12.10	11.23	13.00–12.50	9.00–9.00	11.06
July	10.13	10.58	13.08	13.36	13.44	15.15	10.50	12.50	11.34	13.00–13.00	9.00–9.00	11.23
Aug	10.49	10.65	12.50	12.72	12.87	14.63	10.03	12.43	11.16	13.00–13.00	9.00–9.00	11.64
Sept	10.41	10.51	12.34	12.52	12.66	14.35	10.17	12.53	10.94	13.00–12.75	9.00–9.00	11.30
Oct	9.97	10.05	11.85	12.16	12.63	13.94	10.34	12.77	10.16	12.75–12.00	9.00–9.00	9.99
Nov	8.79	8.99	10.90	11.57	12.29	13.48	10.27	12.75	9.06	12.00–11.25	9.00–8.50	9.43
Dec	8.16	8.36	10.56	11.50	12.13	13.40	10.04	12.55	8.55	11.25–10.75	8.50–8.00	8.38
1985:												
Jan	7.76	8.03	10.43	11.38	12.08	13.26	9.55	12.27	8.15	10.75–10.50	8.00–8.00	8.35
Feb	8.22	8.34	10.55	11.51	12.13	13.23	9.66	12.21	8.69	10.50–10.50	8.00–8.00	8.50
Mar	8.57	8.92	11.05	11.86	12.56	13.69	9.79	11.92	9.23	10.50–10.50	8.00–8.00	8.58
Apr	8.00	8.31	10.49	11.43	12.23	13.51	9.48	12.05	8.47	10.50–10.50	8.00–8.00	8.27
May	7.56	7.75	9.75	10.85	11.72	13.15	9.08	12.01	7.88	10.50–10.00	8.00–7.50	7.97
June	7.01	7.16	9.05	10.16	10.94	12.40	8.78	11.75	7.38	10.00–9.50	7.50–7.50	7.53
July	7.05	7.16	9.18	10.31	10.97	12.43	8.90	11.34	7.57	9.50–9.50	7.50–7.50	7.88
Aug	7.18	7.35	9.31	10.33	11.05	12.50	9.18	11.24	7.74	9.50–9.50	7.50–7.50	7.90
Sept	7.08	7.27	9.37	10.37	11.07	12.48	9.37	11.17	7.86	9.50–9.50	7.50–7.50	7.92
Oct	7.17	7.32	9.25	10.24	11.02	12.36	9.24	11.09	7.79	9.50–9.50	7.50–7.50	7.99
Nov	7.20	7.26	8.88	9.78	10.55	11.99	8.64	11.01	7.69	9.50–9.50	7.50–7.50	8.05
Dec	7.07	7.09	8.40	9.26	10.16	11.58	8.51	10.87	7.62	9.50–9.50	7.50–7.50	8.27

[5] Bank-discount basis; prior to November 1979, data are for 4–6 months paper.

[6] For monthly data, high and low for the period. Prime rate for 1929–33 and 1947–48 are ranges of the rate in effect during the period.

[7] Since July 19, 1975, the daily effective rate is an average of the rates on a given day weighted by the volume of transactions at these rates. Prior to that date, the daily effective rate was the rate considered most representative of the day's transactions, usually the one at which most transactions occurred.

[8] From October 30, 1942, to April 24, 1946, a preferential rate of 0.50 percent was in effect for advances secured by Government securities maturing in 1 year or less.

Sources: Department of the Treasury, Board of Governors of the Federal Reserve System, Federal Home Loan Bank Board (FHLBB), Moody's Investors Service, and Standard & Poor's Corporation.

TABLE B-69.—*Total funds raised in credit markets by nonfinancial sectors, 1976–85*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Item	1976	1977	1978	1979	1980	1981	1982	1983	1984
	Net credit market borrowing by nonfinancial sectors								
Total net borrowing by domestic nonfinancial sectors	243.5	319.4	371.7	388.7	340.0	371.6	398.3	538.9	755.6
U.S. Government	69.0	56.8	53.7	37.4	79.2	87.4	161.3	186.6	198.8
Treasury issues	69.1	57.6	55.1	38.8	79.8	87.8	162.1	186.7	199.0
Agency issues and mortgages	−.1	−.9	−1.4	−1.4	−.6	−.5	−.9	−.1	−.2
Private domestic nonfinancial sectors	174.5	262.6	318.0	351.3	260.8	284.2	237.0	352.3	556.8
Debt capital instruments	123.6	171.1	201.6	213.9	186.3	153.7	153.5	249.1	322.1
Tax-exempt obligations	15.7	21.9	28.4	30.3	30.3	23.4	48.6	57.3	65.8
Corporate bonds	22.8	22.9	21.1	17.3	26.7	21.8	18.7	16.0	42.3
Mortgages	85.1	126.3	152.1	166.2	129.4	108.5	86.2	175.7	214.1
Home mortgages	63.9	94.0	113.6	121.7	93.8	71.6	50.4	115.6	139.2
Multi-family residential	3.9	7.1	9.4	8.3	7.1	4.8	5.3	9.4	14.0
Commercial	11.6	18.1	21.9	24.4	19.2	22.2	25.2	47.6	58.8
Farm	5.7	7.1	7.2	11.8	9.3	9.9	5.3	3.0	2.1
Other debt instruments	50.9	91.6	116.5	137.5	74.5	130.5	83.6	103.3	234.8
Consumer credit	25.4	40.2	48.8	45.4	4.7	22.7	20.1	59.8	96.5
Bank loans n.e.c	4.5	27.1	37.4	51.2	37.0	54.7	54.1	26.7	79.4
Open-market paper	4.0	2.9	5.2	11.1	5.7	19.2	−4.7	−1.6	23.7
Other	16.9	21.3	25.1	29.7	27.1	33.9	14.0	18.3	35.2
By borrowing sector: Total	174.5	262.6	318.0	351.3	260.8	284.2	237.0	352.3	556.8
State and local governments	13.2	12.0	16.5	17.6	17.2	6.8	25.9	37.6	45.0
Households	91.5	140.7	173.4	181.0	117.9	119.2	90.4	190.4	249.5
Nonfinancial business	69.8	110.0	128.1	152.7	125.7	158.3	120.7	124.3	262.4
Farm	10.2	12.3	14.6	21.4	14.3	16.4	7.9	4.5	2.9
Nonfarm noncorporate	15.4	28.0	32.8	35.3	31.0	38.4	40.9	65.2	77.8
Corporate	44.2	69.7	80.6	96.0	80.4	103.4	71.9	54.6	181.7
Foreign net borrowing in United States	19.3	13.5	33.8	20.2	27.2	27.2	15.7	18.9	1.7
Bonds	8.6	5.1	4.2	3.9	.8	5.4	6.7	3.8	4.1
Bank loans n.e.c	5.6	3.1	19.1	2.3	11.5	3.7	−6.2	4.9	−7.8
Open-market paper	1.9	2.4	6.6	11.2	10.1	13.9	10.7	6.0	1.4
U.S. Government loans	3.3	3.0	3.9	2.9	4.7	4.2	4.5	4.3	4.0
Total domestic plus foreign	262.8	332.9	405.5	408.9	367.2	398.8	414.0	557.8	757.4
	Direct and indirect supply of funds to credit markets								
Total funds supplied to domestic nonfinancial sectors	243.5	319.4	371.7	388.7	340.0	371.6	398.3	538.9	755.6
Private domestic nonfinancial sectors	170.7	185.5	218.4	246.5	227.6	294.7	270.1	367.2	484.5
Deposits and currency	132.1	149.0	153.9	146.8	181.1	221.9	181.6	224.4	292.2
Checkable deposits and currency	17.8	25.3	25.4	26.2	15.5	27.5	25.1	37.4	30.0
Time and savings deposits	110.3	120.0	112.1	78.1	128.7	83.9	130.5	212.0	225.0
Money market fund shares	.0	.2	6.9	34.4	29.2	107.5	24.7	−44.1	47.2
Security repurchase agreements	2.3	2.2	7.5	6.6	6.5	2.5	3.8	14.3	−5.8
Foreign deposits	1.7	1.3	2.0	1.5	1.1	.5	−2.5	4.8	−4.0
Credit market instruments	38.7	36.5	64.4	99.7	46.5	72.9	88.5	142.8	192.2
Foreign funds	10.6	41.0	39.8	23.1	1.6	7.6	−3.9	49.2	62.4
At banks	−4.5	1.4	6.5	27.6	−21.7	−8.7	−26.7	22.1	19.0
Credit market instruments	15.2	39.6	33.3	−4.5	23.3	16.2	22.8	27.1	43.4
U.S. Government and related loans, net	1.1	4.1	−6.5	11.6	1.8	6.9	10.7	3.7	22.3
U.S. Government cash balances	−.1	4.3	6.8	.4	−2.6	−1.1	6.1	−5.3	4.0
Private insurance and pension reserves	41.5	55.4	74.8	72.9	83.7	90.7	103.2	95.1	111.7
Other sources	19.7	29.1	38.6	34.2	27.9	−27.2	12.1	28.9	70.8

See next page for continuation of table.

Table B-69.—*Total funds raised in credit markets by nonfinancial sectors, 1976–85*—Continued

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Item	1984				1985		
	I	II	III	IV	I	II	III
	Net credit market borrowing by nonfinancial sectors						
Total net borrowing by domestic nonfinancial sectors	661.0	747.0	704.7	909.9	675.5	760.4	742.2
U.S. Government	173.5	171.9	194.9	254.9	144.1	218.1	166.4
Treasury issues	173.8	172.1	195.1	255.0	144.2	218.2	166.4
Agency issues and mortgages	−.3	−.1	−.1	−.1	−.2	−.1	−.1
Private domestic nonfinancial sectors	487.5	575.1	509.8	655.0	531.4	542.4	575.8
Debt capital instruments	258.4	305.2	333.2	391.5	323.0	376.3	404.1
Tax-exempt obligations	42.1	35.7	72.3	113.0	73.9	103.2	145.8
Corporate bonds	19.8	28.9	49.4	70.9	53.7	69.2	56.9
Mortgages	196.4	240.6	211.5	207.7	195.5	203.9	201.5
Home mortgages	136.8	152.9	131.8	135.2	130.6	142.8	149.1
Multi-family residential	12.3	19.7	9.5	14.5	19.3	11.0	13.0
Commercial	45.8	65.5	67.4	56.6	45.7	53.8	48.5
Farm	1.7	2.4	2.8	1.4	−.1	−3.6	−9.1
Other debt instruments	229.1	269.9	176.6	263.5	208.4	166.0	171.7
Consumer credit	78.8	125.4	90.2	91.5	121.3	112.1	115.2
Bank loans n.e.c.	93.5	86.8	35.3	102.0	17.0	33.9	35.0
Open-market paper	26.7	40.3	22.6	5.0	24.0	8.6	1.5
Other	30.1	17.3	28.5	64.9	46.2	11.5	20.0
By borrowing sector: Total	487.5	575.1	509.8	655.0	531.4	542.4	575.8
State and local governments	23.9	18.8	52.9	84.3	61.1	82.2	116.8
Households	215.5	280.9	232.1	269.3	263.5	272.6	295.3
Nonfinancial business	248.1	275.3	224.8	301.4	206.8	187.6	163.7
Farm	3.8	.4	6.5	1.1	−11.0	−3.3	−8.1
Nonfarm noncorporate	74.6	91.4	75.0	70.1	73.9	68.9	73.3
Corporate	169.7	183.5	143.4	230.3	144.0	122.1	98.5
Foreign net borrowing in United States	−6.5	52.3	−38.5	−.4	−8.0	−6.1	5.8
Bonds	−1.1	3.3	2.4	11.7	2.3	8.0	5.5
Bank loans n.e.c.	−2.8	−6.4	−14.2	−7.8	−12.2	.3	−6.7
Open-market paper	−9.1	50.9	−30.3	−5.9	−.1	−17.5	5.5
U.S. Government loans	6.5	4.5	3.7	1.5	2.0	3.1	1.5
Total domestic plus foreign	654.5	799.3	666.2	909.4	667.5	754.3	748.0
	Direct and indirect supply of funds to credit markets						
Total funds supplied to domestic nonfinancial sectors	661.0	747.0	704.7	909.9	675.5	760.4	742.2
Private domestic nonfinancial sectors	404.9	521.7	447.9	563.3	435.8	360.7	425.1
Deposits and currency	291.4	285.6	221.7	370.2	182.5	193.6	204.3
Checkable deposits and currency	51.0	30.7	−19.8	57.9	−11.8	63.7	116.4
Time and savings deposits	200.3	236.9	241.2	221.4	196.4	130.5	115.4
Money market fund shares	44.9	15.4	20.5	107.9	−12.1	20.4	−21.2
Security repurchase ageements	−1.4	8.1	−15.8	−14.2	10.8	−13.3	−3.5
Foreign deposits	−3.5	−5.4	−4.4	−2.8	−.9	−7.8	−2.8
Credit market instruments	113.5	236.1	226.2	193.1	253.4	167.1	220.9
Foreign funds	46.9	67.2	48.7	86.8	44.0	75.3	130.2
At banks	29.1	25.3	16.1	5.7	28.9	−7.3	40.5
Credit market instruments	17.8	41.9	32.6	81.2	15.2	82.6	89.7
U.S. Government and related loans, net	25.8	−24.1	15.6	71.7	67.8	49.7	20.7
U.S. Government cash balances	5.1	−1.8	16.3	−3.5	−12.1	50.9	−71.7
Private insurance and pension reserves	109.0	126.9	93.9	117.0	68.5	166.2	137.4
Other sources	69.2	57.1	82.3	74.5	71.4	57.7	100.5

Source: Board of Governors of the Federal Reserve System.

TABLE B-70.—*Mortgage debt outstanding by type of property and of financing, 1939–85*

[Billions of dollars]

End of year or quarter	All properties	Farm properties	Nonfarm properties				Nonfarm properties by type of mortgage					
			Total	1- to 4-family houses	Multifamily properties	Commercial properties [1]	Government underwritten				Conventional [3]	
							Total [2]	1- to 4-family houses			Total	1- to 4-family houses
								Total	FHA insured	VA guaranteed		
1939	35.5	6.6	28.9	16.3	5.6	7.0	1.8	1.8	1.8	...	27.1	14.5
1940	36.5	6.5	30.0	17.4	5.7	6.9	2.3	2.3	2.3	...	27.7	15.1
1941	37.6	6.4	31.2	18.4	5.9	7.0	3.0	3.0	3.0	...	28.2	15.4
1942	36.7	6.0	30.8	18.2	5.8	6.7	3.7	3.7	3.7	...	27.1	14.5
1943	35.3	5.4	29.9	17.8	5.8	6.3	4.1	4.1	4.1	...	25.8	13.7
1944	34.7	4.9	29.7	17.9	5.6	6.2	4.2	4.2	4.2	...	25.5	13.7
1945	35.5	4.8	30.8	18.6	5.7	6.4	4.3	4.3	4.1	0.2	26.5	14.3
1946	41.8	4.9	36.9	23.0	6.1	7.7	6.3	6.1	3.7	2.4	30.6	16.9
1947	48.9	5.1	43.9	28.2	6.6	9.1	9.8	9.3	3.8	5.5	34.1	18.9
1948	56.2	5.3	50.9	33.3	7.5	10.2	13.6	12.5	5.3	7.2	37.3	20.8
1949	62.7	5.6	57.1	37.6	8.6	10.8	17.1	15.0	6.9	8.1	40.0	22.6
1950	72.8	6.1	66.7	45.2	10.1	11.5	22.1	18.8	8.5	10.3	44.7	26.3
1951	82.3	6.7	75.6	51.7	11.5	12.5	26.6	22.9	9.7	13.2	49.1	28.9
1952	91.4	7.2	84.2	58.5	12.3	13.4	29.3	25.4	10.8	14.6	54.9	33.2
1953	101.3	7.7	93.6	66.1	12.9	14.5	32.1	28.1	12.0	16.1	61.5	38.0
1954	113.7	8.2	105.4	75.7	13.5	16.3	36.2	32.1	12.8	19.3	69.3	43.6
1955	129.9	9.0	120.9	88.2	14.3	18.3	42.9	38.9	14.3	24.6	78.0	49.3
1956	144.5	9.8	134.6	99.0	14.9	20.7	47.8	43.9	15.5	28.4	86.8	55.1
1957	156.5	10.4	146.1	107.6	15.3	23.2	51.6	47.2	16.5	30.7	94.6	60.4
1958	171.8	11.1	160.7	117.7	16.8	26.1	55.2	50.1	19.7	30.4	105.5	67.6
1959	190.8	12.1	178.7	130.9	18.7	29.2	59.3	53.8	23.8	30.0	119.4	77.0
1960	207.5	12.8	194.7	141.9	20.3	32.4	62.3	56.4	26.7	29.7	132.3	85.5
1961	228.0	13.9	214.1	154.6	23.0	36.5	65.6	59.1	29.5	29.6	148.5	95.5
1962	251.4	15.2	236.2	169.3	25.8	41.1	69.4	62.2	32.3	29.9	166.9	107.1
1963	278.5	16.8	261.7	186.4	29.0	46.2	73.4	65.9	35.0	30.9	188.2	120.5
1964	305.9	18.9	287.0	203.4	33.6	50.0	77.2	69.2	38.3	30.9	209.8	134.1
1965	333.3	21.2	312.1	220.5	37.2	54.5	81.2	73.1	42.0	31.1	231.0	147.4
1966	356.5	23.1	333.4	232.9	40.3	60.1	84.1	76.1	44.8	31.3	249.3	156.9
1967	381.2	25.1	356.1	247.3	43.9	64.8	88.2	79.9	47.4	32.5	267.9	167.4
1968	410.9	27.4	383.5	264.8	47.3	71.4	93.4	84.4	50.6	33.8	290.1	180.4
1969	441.4	29.2	412.2	283.2	52.2	76.9	100.2	90.2	54.5	35.7	312.0	193.0
1970	473.5	30.3	443.2	297.4	60.1	85.6	109.2	97.3	59.9	37.3	333.9	200.2
1971	524.0	32.2	491.8	325.9	70.1	95.9	120.7	105.2	65.7	39.5	371.1	220.7
1972	597.1	35.1	562.0	366.5	82.8	112.7	131.1	113.0	68.2	44.7	430.9	253.5
1973	672.3	39.5	632.8	407.9	93.1	131.7	135.0	116.2	66.2	50.0	497.7	291.7
1974	732.3	44.7	687.5	440.7	100.0	146.9	140.2	121.3	65.1	56.2	547.3	319.4
1975	791.7	49.7	742.0	482.1	100.6	159.3	147.0	127.7	66.1	61.6	595.0	354.3
1976	878.5	55.3	823.2	546.3	105.7	171.2	154.1	133.5	66.5	67.0	669.0	412.8
1977	1,009.8	63.5	946.4	642.7	114.0	189.7	161.7	141.6	68.0	73.6	784.6	501.0
1978	1,161.9	71.6	1,090.2	753.5	124.9	211.8	176.4	153.4	71.4	82.0	913.9	600.2
1979	1,327.3	85.6	1,241.7	870.5	134.9	236.3	199.0	172.9	81.0	92.0	1,042.7	697.6
1980	1,457.5	95.8	1,361.8	963.9	142.3	255.5	225.1	195.2	93.6	101.6	1,136.7	768.8
1981	1,564.0	105.8	1,458.2	1,038.5	142.1	277.5	238.9	207.6	101.3	106.2	1,219.3	830.9
1982	1,631.3	110.0	1,521.2	1,074.7	145.8	300.8	248.9	217.9	108.0	109.9	1,272.4	856.8
1983	1,811.4	112.6	1,698.8	1,192.8	156.7	349.2	279.8	248.8	127.4	121.4	1,419.0	944.0
1984	2,022.5	111.6	1,910.9	1,329.6	170.5	410.7	294.8	265.9	136.7	129.1	1,616.0	1,063.7
1983: I	1,659.7	110.3	1,549.4	1,093.2	146.6	309.6	252.5	222.1	110.8	111.3	1,296.9	871.1
II	1,703.9	111.3	1,592.6	1,120.9	149.8	322.0	261.1	230.0	115.8	114.3	1,331.5	890.8
III	1,759.0	112.1	1,646.8	1,158.2	153.5	335.1	273.7	241.7	123.8	117.9	1,373.2	916.5
IV	1,811.4	112.6	1,698.8	1,192.8	156.7	349.2	279.8	248.8	127.4	121.4	1,419.0	944.0
1984: I	1,855.9	112.4	1,743.6	1,223.4	160.3	359.9	286.8	255.9	131.1	124.8	1,456.8	967.5
II	1,917.2	112.6	1,804.6	1,261.8	165.4	377.5	290.5	260.5	133.6	126.9	1,514.2	1,001.3
III	1,972.8	112.7	1,860.1	1,296.5	167.9	395.7	292.9	263.6	135.6	128.0	1,567.3	1,032.9
IV	2,022.5	111.6	1,910.9	1,329.6	170.5	410.7	294.8	265.9	136.7	129.1	1,616.0	1,063.7
1985: I	2,068.3	111.5	1,956.8	1,360.3	175.5	421.0	299.7	270.6	139.8	130.8	1,657.1	1,089.7
II	2,126.9	110.8	2,016.1	1,402.0	178.5	435.7	305.4	276.0	144.3	131.6	1,710.7	1,126.0
III	2,183.9	109.0	2,074.9	1,443.7	181.5	449.8	323.8	282.6	148.3	134.3	1,751.1	1,161.0

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[1] Includes negligible amount of farm loans held by savings and loan associations.

[2] Includes FHA insured multifamily properties, not shown separately.

[3] Derived figures. Total includes multifamily and commercial properties, not shown separately.

Source: Board of Governors of the Federal Reserve System, based on data from various Government and private organizations.

TABLE B–71.—*Mortgage debt outstanding by holder, 1939–85*

[Billions of dollars]

End of year or quarter	Total	Major financial institutions					Other holders	
		Total	Savings and loan associations	Savings banks	Commercial banks [1]	Life insurance companies	Federal and related agencies [2]	Individuals and others
1939	35.5	18.6	3.8	4.8	4.3	5.7	5.0	11.9
1940	36.5	19.5	4.1	4.9	4.6	6.0	4.9	12.0
1941	37.6	20.7	4.6	4.8	4.9	6.4	4.7	12.2
1942	36.7	20.7	4.6	4.6	4.7	6.7	4.3	11.7
1943	35.3	20.2	4.6	4.4	4.5	6.7	3.6	11.5
1944	34.7	20.2	4.8	4.3	4.4	6.7	3.0	11.5
1945	35.5	21.0	5.4	4.2	4.8	6.6	2.4	12.1
1946	41.8	26.0	7.1	4.4	7.2	7.2	2.0	13.8
1947	48.9	31.8	8.9	4.9	9.4	8.7	1.8	15.3
1948	56.2	37.8	10.3	5.8	10.9	10.8	1.8	16.6
1949	62.7	42.9	11.6	6.7	11.6	12.9	2.3	17.5
1950	72.8	51.7	13.7	8.3	13.7	16.1	2.8	18.4
1951	82.3	59.5	15.6	9.9	14.7	19.3	3.5	19.3
1952	91.4	66.9	18.4	11.4	15.9	21.3	4.1	20.4
1953	101.3	75.1	22.0	12.9	16.9	23.3	4.6	21.7
1954	113.7	85.7	26.1	15.0	18.6	26.0	4.8	23.2
1955	129.9	99.3	31.4	17.5	21.0	29.4	5.3	25.3
1956	144.5	111.2	35.7	19.7	22.7	33.0	6.2	27.1
1957	156.5	119.7	40.0	21.2	23.3	35.2	7.7	29.1
1958	171.8	131.5	45.6	23.3	25.5	37.1	8.0	32.3
1959	190.8	145.5	53.1	25.0	28.1	39.2	10.2	35.1
1960	207.5	157.6	60.1	26.9	28.8	41.8	11.5	38.4
1961	228.0	172.6	68.8	29.1	30.4	44.2	12.2	43.1
1962	251.4	192.5	78.8	32.3	34.5	46.9	12.6	46.3
1963	278.5	217.1	90.9	36.2	39.4	50.5	11.8	49.5
1964	305.9	241.0	101.3	40.6	44.0	55.2	12.2	52.7
1965	333.3	264.6	110.3	44.6	49.7	60.0	13.5	55.2
1966	356.5	280.8	114.4	47.3	54.4	64.6	17.5	58.2
1967	381.2	298.8	121.8	50.5	59.0	67.5	20.9	61.4
1968	410.9	319.9	130.8	53.5	65.7	70.0	25.1	65.9
1969	441.4	339.1	140.2	56.1	70.7	72.0	31.1	71.2
1970	473.5	355.9	150.3	57.9	73.3	74.4	38.3	79.3
1971	524.0	394.2	174.3	62.0	82.5	75.5	46.4	83.4
1972	597.1	450.0	206.2	67.6	99.3	76.9	54.6	92.5
1973	672.3	505.4	231.7	73.2	119.1	81.4	64.8	102.2
1974	732.3	542.6	249.3	74.9	132.1	86.2	82.2	107.5
1975	791.7	581.2	278.6	77.2	136.2	89.2	101.1	109.4
1976	878.5	647.5	323.0	81.6	151.3	91.6	116.7	114.3
1977	1,009.8	745.2	381.2	88.2	179.0	96.8	140.5	124.1
1978	1,161.9	848.2	432.8	95.2	214.0	106.2	170.6	143.1
1979	1,327.3	938.2	475.7	98.9	245.2	118.4	216.0	173.1
1980	1,457.5	996.8	503.2	99.9	262.7	131.1	256.8	203.9
1981	1,564.0	1,040.5	518.5	100.0	284.2	137.7	289.4	234.1
1982	1,631.3	1,021.3	483.6	94.5	301.3	142.0	355.4	254.5
1983	1,811.4	1,108.2	494.8	131.9	330.5	151.0	433.4	269.7
1984	2.022.5	1,241.2	555.3	154.4	374.8	156.7	491.1	290.3
1983: I	1,659.7	1,026.3	477.4	101.6	303.9	143.3	375.3	258.1
II	1,703.9	1,045.7	475.2	114.7	311.1	144.7	395.5	262.6
III	1,759.0	1,077.5	483.3	125.5	321.2	147.4	415.7	265.8
IV	1,811.4	1,108.2	494.8	131.9	330.5	151.0	433.4	269.7
1984: I	1,855.9	1,133.6	503.5	139.1	339.7	151.3	448.4	274.0
II	1,917.2	1,177.3	528.2	143.4	352.3	153.5	458.9	280.9
III	1,972.8	1,214.7	550.1	146.1	363.2	155.4	472.3	285.7
IV	2,022.5	1,241.2	555.3	154.4	374.8	156.7	491.1	290.3
1985: I	2,068.3	1,261.9	559.3	161.0	383.4	158.2	511.3	295.1
II	2,126.9	1,292.4	569.3	165.7	396.0	161.5	531.7	302.8
III	2,183.9	1,321.2	575.6	173.5	408.2	163.9	555.2	307.5

[1] Includes loans held by nondeposit trust companies, but not by bank trust departments.

[2] Includes former Federal National Mortgage Association (FNMA) and new Government National Mortgage Association (GNMA), as well as Federal Housing Administration, Veterans Administration, Public Housing Administration, Farmers Home Administration (FmHA), and in earlier years Reconstruction Finance Corporation, Homeowners Loan Corporation, and Federal Farm Mortgage Corporation. Also includes U.S.-sponsored agencies such as new FNMA, Federal Land Banks, Federal Home Loan Mortgage Corporation (FHLMC), and mortgage pass-through securities issued or guaranteed by GNMA, FHLMC, FNMA or FmHA. Other U.S. agencies (amounts small or current separate data not readily available) included with "individuals and others."

Source: Board of Governors of the Federal Reserve System, based on data from various Government and private organizations.

TABLE B-72.—*Consumer credit outstanding, 1950–85*

[Amount outstanding (end of month); millions of dollars, seasonally adjusted]

Year and month	Total consumer credit	Installment credit [1]					Noninstallment credit [4]
		Total	Automobile	Revolving [2]	Mobile home [3]	Other	
December:							
1950	25,018	15,166	6,035	....	....	9,131	9,852
1951	26,576	15,859	5,981	....	....	9,878	10,717
1952	31,830	20,121	7,651	....	....	12,470	11,709
1953	35,928	23,870	9,702	....	....	14,168	12,058
1954	37,293	24,470	9,755	....	....	14,715	12,823
1955	44,319	29,809	13,485	....	....	16,324	14,510
1956	48,224	32,660	14,499	....	....	18,161	15,564
1957	51,136	34,914	15,493	....	....	19,421	16,222
1958	51,595	34,736	14,267	....	....	20,469	16,859
1959	59,432	40,421	16,641	....	....	23,780	19,011
1960	63,928	44,335	18,108	....	....	26,227	19,593
1961	66,569	45,438	17,656	....	....	27,782	21,131
1962	72,830	50,375	20,001	....	....	30,374	22,455
1963	81,578	57,056	22,891	....	....	34,165	24,522
1964	91,279	64,674	25,865	....	....	38,809	26,605
1965	101,726	72,814	29,378	....	....	43,436	28,912
1966	108,227	78,162	31,024	....	....	47,138	30,065
1967	113,628	81,783	31,136	....	....	50,647	31,845
1968	124,915	90,112	34,352	2,022	....	53,738	34,803
1969	135,431	99,381	36,946	3,563	....	58,872	36,050
1970	141,010	103,905	36,348	4,900	2,433	60,224	37,105
1971	155,537	116,434	40,522	8,252	7,171	60,489	39,103
1972	175,286	131,258	47,835	9,391	9,468	64,564	44,028
1973	200,894	152,910	53,740	11,318	13,505	74,347	47,984
1974	210,634	162,203	54,241	13,232	14,582	80,148	48,431
1975	219,772	169,387	57,279	14,467	14,382	83,259	50,385
1976	244,932	190,725	67,798	16,505	14,530	91,892	54,207
1977	284,599	226,646	82,890	36,427	14,897	92,432	57,953
1978	332,849	269,392	101,863	45,004	15,199	107,326	63,457
1979	377,486	307,115	116,523	53,174	16,843	120,575	70,371
1980	369,842	296,290	112,134	54,900	18,783	110,473	73,552
1981	392,287	312,907	119,796	60,309	19,890	112,912	79,380
1982	412,811	328,275	124,938	65,019	22,491	115,827	84,536
1983	471,551	376,006	142,497	76,453	23,773	133,283	95,545
1984	566,919	452,372	172,461	94,940	24,552	160,419	114,547
1984: Jan	477,437	381,273	145,451	76,998	23,799	135,025	96,164
Feb	485,001	387,461	147,885	78,069	23,745	137,762	97,540
Mar	491,615	393,389	148,933	81,029	23,768	139,660	98,226
Apr	500,241	400,182	151,273	82,880	23,911	142,118	100,059
May	511,891	409,275	154,914	85,518	24,049	144,794	102,616
June	521,172	416,357	157,639	86,874	24,240	147,604	104,815
July	529,505	422,838	160,726	87,646	24,574	149,892	106,667
Aug	537,591	428,860	163,208	88,909	24,791	151,952	108,731
Sept	543,148	433,842	164,721	90,393	24,918	153,810	109,306
Oct	550,624	439,473	167,225	91,881	24,526	155,841	111,151
Nov	557,867	445,553	169,774	93,495	24,435	157,849	112,314
Dec	566,919	452,372	172,461	94,940	24,552	160,419	114,547
1985: Jan	575,873	459,595	175,348	96,897	24,393	162,957	116,278
Feb	586,842	468,636	178,546	99,424	24,675	165,991	118,206
Mar	597,235	476,978	181,937	102,055	24,664	168,322	120,257
Apr	607,308	485,248	185,425	104,181	24,882	170,760	122,060
May	618,555	494,290	189,217	106,610	25,068	173,395	124,265
June	625,254	499,517	191,903	106,537	25,264	175,813	125,737
July	633,980	505,764	194,268	107,393	25,588	178,515	128,216
Aug	641,634	511,490	196,474	108,329	25,787	180,900	130,144
Sept	654,377	523,021	203,678	110,303	25,955	183,085	131,356
Oct	662,417	531,146	207,332	112,345	26,133	185,336	131,271
Nov	667,870	536,029	208,417	115,201	26,129	186,282	131,841

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[1] Installment credit covers most short- and intermediate-term credit extended to individuals through regular business channels, usually to finance the purchase of consumer goods and services or to refinance debts incurred for such purposes, and scheduled to be repaid (or with the option of repayment) in two or more installments. Credit secured by real estate is generally excluded.

[2] Consists of credit cards at retailers, gasoline companies, and commercial banks, and check credit at commercial banks. Prior to 1968, included in "other," except gasoline companies, included in noninstallment credit prior to 1971. Beginning 1977, includes open-end credit at retailers, previously included in "other." Also beginning 1977, some retail credit was reclassified from commercial into consumer credit.

[3] Not reported separately prior to July 1970.

[4] Noninstallment credit is credit scheduled to be repaid in a lump sum, including single-payment loans, charge accounts, and service credit. Because of inconsistencies in the data and infrequent benchmarking, series is no longer published by the Federal Reserve Board on a regular basis. Data are shown here as a general indication of trends.

Source: Board of Governors of the Federal Reserve System.

GOVERNMENT FINANCE

TABLE B-73.—*Federal receipts, outlays, surplus or deficit, and debt, selected fiscal years 1929–87*

[Billions of dollars; fiscal years]

Fiscal year or period	Total			On-budget			Off-budget			Gross Federal debt (end of period)		Addendum: Gross national product
	Receipts	Outlays	Surplus or deficit (−)	Receipts	Outlays	Surplus or deficit (−)	Receipts	Outlays	Surplus or deficit (−)	Total	Held by the public	
1929	3.9	3.1	0.7	....	....	....	....	....	....	[1] 16.9	....	....
1933	2.0	4.6	−2.6	....	....	....	....	....	....	[1] 22.5	....	....
1939	6.3	9.1	−2.8	5.8	9.2	−3.4	0.5	0.0	0.5	48.2	41.4	....
1940	6.5	9.5	−2.9	6.0	9.5	−3.5	.6	.0	.6	50.7	42.8	95.8
1941	8.7	13.7	−4.9	8.0	13.6	−5.6	.7	.0	.7	57.5	48.2	113.0
1942	14.6	35.1	−20.5	13.7	35.1	−21.3	.9	.1	.8	79.2	67.8	142.2
1943	24.0	78.6	−54.6	22.9	78.5	−55.6	1.1	.1	1.0	142.6	127.8	175.8
1944	43.7	91.3	−47.6	42.5	91.2	−48.7	1.3	.1	1.2	204.1	184.8	202.0
1945	45.2	92.7	−47.6	43.8	92.6	−48.7	1.3	.1	1.2	260.1	235.2	212.4
1946	39.3	55.2	−15.9	38.1	55.0	−17.0	1.2	.2	1.0	271.0	241.9	212.9
1947	38.5	34.5	4.0	37.1	34.2	2.9	1.5	.3	1.2	257.1	224.3	225.0
1948	41.6	29.8	11.8	39.9	29.4	10.5	1.6	.4	1.2	252.0	216.3	248.5
1949	39.4	38.8	.6	37.7	38.4	−.7	1.7	.4	1.3	252.6	214.3	264.1
1950	39.4	42.6	−3.1	37.3	42.0	−4.7	2.1	.5	1.6	256.9	219.0	266.9
1951	51.6	45.5	6.1	48.5	44.2	4.3	3.1	1.3	1.8	255.3	214.3	314.7
1952	66.2	67.7	−1.5	62.6	66.0	−3.4	3.6	1.7	1.9	259.1	214.8	342.7
1953	69.6	76.1	−6.5	65.5	73.8	−8.3	4.1	2.3	1.8	266.0	218.4	365.1
1954	69.7	70.9	−1.2	65.1	67.9	−2.8	4.6	2.9	1.7	270.8	224.5	369.4
1955	65.5	68.4	−3.0	60.4	64.5	−4.1	5.1	4.0	1.1	274.4	226.6	387.6
1956	74.6	70.6	3.9	68.2	65.7	2.5	6.4	5.0	1.5	272.8	222.2	418.0
1957	80.0	76.6	3.4	73.2	70.6	2.6	6.8	6.0	.8	272.4	219.4	441.2
1958	79.6	82.4	−2.8	71.6	74.9	−3.3	8.0	7.5	.5	279.7	226.4	449.8
1959	79.2	92.1	−12.8	71.0	83.1	−12.1	8.3	9.0	−.7	287.8	235.0	479.5
1960	92.5	92.2	.3	81.9	81.3	.5	10.6	10.9	−.2	290.9	237.2	507.7
1961	94.4	97.7	−3.3	82.3	86.0	−3.8	12.1	11.7	.4	292.9	238.6	519.0
1962	99.7	106.8	−7.1	87.4	93.3	−5.9	12.3	13.5	−1.3	303.3	248.4	556.6
1963	106.6	111.3	−4.8	92.4	96.4	−4.0	14.2	15.0	−.8	310.8	254.5	588.6
1964	112.6	118.5	−5.9	96.2	102.8	−6.5	16.4	15.7	.6	316.8	257.6	629.4
1965	116.8	118.2	−1.4	100.1	101.7	−1.6	16.7	16.5	.2	323.2	261.6	673.6
1966	130.8	134.5	−3.7	111.7	114.8	−3.1	19.1	19.7	−.6	329.5	264.7	740.5
1967	148.8	157.5	−8.6	124.4	137.0	−12.6	24.4	20.4	4.0	341.3	267.5	793.5
1968	153.0	178.1	−25.2	128.1	155.8	−27.7	24.9	22.3	2.6	369.8	290.6	852.4
1969	186.9	183.6	3.2	157.9	158.4	−.5	29.0	25.2	3.7	367.1	279.5	929.5
1970	192.8	195.6	−2.8	159.3	168.0	−8.7	33.5	27.6	5.9	382.6	284.9	990.5
1971	187.1	210.2	−23.0	151.3	177.3	−26.1	35.8	32.8	3.0	409.5	304.3	1,057.1
1972	207.3	230.7	−23.4	167.4	193.8	−26.4	39.9	36.9	3.1	437.3	323.8	1,151.2
1973	230.8	245.7	−14.9	184.7	200.1	−15.4	46.1	45.6	.5	468.4	343.0	1,285.5
1974	263.2	269.4	−6.1	209.3	217.3	−8.0	53.9	52.1	1.8	486.2	346.1	1,417.0
1975	279.1	332.3	−53.2	216.6	271.9	−55.3	62.5	60.4	2.0	544.1	396.9	1,523.5
1976	298.1	371.8	−73.7	231.7	302.2	−70.5	66.4	69.6	−3.2	631.9	480.3	1,699.6
Transition quarter	81.2	96.0	−14.7	63.2	76.6	−13.3	18.0	19.4	−1.4	646.4	498.3	448.7
1977	355.6	409.2	−53.6	278.7	328.5	−49.7	76.8	80.7	−3.9	709.1	551.8	1,935.8
1978	399.6	458.7	−59.2	314.2	369.1	−54.9	85.4	89.7	−4.3	780.4	610.9	2,173.4
1979	463.3	503.5	−40.2	365.3	403.5	−38.2	98.0	100.0	−2.0	833.8	644.6	2,452.2
1980	517.1	590.9	−73.8	403.9	476.6	−72.7	113.2	114.3	−1.1	914.3	715.1	2,667.6
1981	599.3	678.2	−78.9	469.1	543.0	−73.9	130.2	135.2	−5.0	1,003.9	794.4	2,986.2
1982	617.8	745.7	−127.9	474.3	594.3	−120.0	143.5	151.4	−7.9	1,147.0	929.4	3,141.5
1983	600.6	808.3	−207.8	453.2	661.2	−208.0	147.3	147.1	.2	1,381.9	1,141.8	3,320.9
1984	666.5	851.8	−185.3	500.4	686.0	−185.6	166.1	165.8	.3	1,576.7	1,312.6	3,695.3
1985	734.1	946.3	−212.3	547.9	769.5	−221.6	186.2	176.8	9.4	1,827.5	1,509.9	3,936.8
1986 [2]	777.1	979.9	−202.8	579.2	795.2	−216.0	197.9	184.7	13.2	2,112.0	1,714.0	4,192.2
1987 [2]	850.4	994.0	−143.6	636.1	795.4	−159.3	214.3	198.6	15.7	2,320.6	1,855.7	4,538.1

[1] Not strictly comparable with later data.

[2] Estimates.

Note.—Through fiscal year 1976, the fiscal year was on a July 1–June 30 basis; beginning October 1976 (fiscal year 1977), the fiscal year is on an October 1–September 30 basis. The 3-month period from July 1, 1976 through September 30, 1976 is a separate fiscal period known as the transition quarter.

Refunds of receipts are excluded from receipts and outlays.

See "Budget of the United States Government, FY 1987" for additional information.

Sources: Department of the Treasury, Office of Management and Budget, and Department of Commerce (Bureau of Economic Analysis).

TABLE B-74.—*Federal receipts, outlays, and debt, fiscal years 1978–87*

[Millions of dollars; fiscal years]

Description	Actual				
	1978	1979	1980	1981	1982
RECEIPTS AND OUTLAYS:					
Total receipts	399,561	463,302	517,112	599,272	617,766
Total outlays	458,729	503,464	590,920	678,209	745,706
Total surplus or deficit (-)	-59,168	-40,162	-73,808	-78,936	-127,940
On-budget receipts	314,169	365,309	403,903	469,097	474,299
On-budget outlays	369,072	403,486	476,591	543,013	594,302
On-budget surplus or deficit (-)	-54,902	-38,178	-72,689	-73,916	-120,003
Off-budget receipts	85,391	97,994	113,209	130,176	143,467
Off-budget outlays	89,657	99,978	114,329	135,196	151,404
Off-budget surplus or deficit (-)	-4,266	-1,984	-1,120	-5,020	-7,937
OUTSTANDING DEBT, END OF PERIOD:					
Gross Federal debt	780,425	833,751	914,317	1,003,941	1,146,987
Held by Government agencies	169,477	189,162	199,212	209,507	217,560
Held by the public	610,948	644,589	715,105	794,434	929,427
Federal Reserve System	115,480	115,594	120,846	124,466	134,497
Other	495,468	528,995	594,259	669,968	794,930
RECEIPTS: ON-BUDGET AND OFF-BUDGET	399,561	463,302	517,112	599,272	617,766
Individual income taxes	180,988	217,841	244,069	285,917	297,744
Corporation income taxes	59,952	65,677	64,600	61,137	49,207
Social insurance taxes and contributions	120,967	138,939	157,803	182,720	201,498
On-budget	35,576	40,945	44,594	52,545	58,031
Off-budget	85,391	97,994	113,209	130,176	143,467
Excise taxes	18,376	18,745	24,329	40,839	36,311
Estate and gift taxes	5,285	5,411	6,389	6,787	7,991
Customs duties	6,573	7,439	7,174	8,083	8,854
Miscellaneous receipts:					
Deposits of earnings by Federal Reserve System	6,641	8,327	11,767	12,834	15,186
All other	778	925	981	956	975
OUTLAYS: ON-BUDGET AND OFF-BUDGET	458,729	503,464	590,920	678,209	745,706
National defense	104,495	116,342	133,995	157,513	185,309
International affairs	7,482	7,459	12,714	13,104	12,300
General science, space, and technology	4,926	5,235	5,832	6,469	7,200
Energy	7,992	9,180	10,156	15,166	13,527
Natural resources and environment	10,983	12,135	13,858	13,568	12,998
Agriculture	11,357	11,236	8,839	11,323	15,944
Commerce and housing credit	6,254	4,686	9,390	8,206	6,256
Transportation	15,521	17,532	21,329	23,379	20,625
Community and regional development	11,841	10,480	11,252	10,568	8,347
Education, training, employment, and social services	26,710	30,223	31,843	33,709	27,029
Health	18,524	20,494	23,169	26,866	27,445
Medicare	22,768	26,495	32,090	39,149	46,567
Income security	61,488	66,359	86,540	99,723	107,717
Social security	93,861	104,073	118,547	139,584	155,964
On-budget	741	757	675	670	844
Off-budget	93,120	103,316	117,872	138,914	155,120
Veterans benefits and services	18,978	19,931	21,185	22,991	23,958
Administration of justice	3,810	4,169	4,582	4,762	4,703
General government	3,576	3,928	4,448	4,582	4,532
General purpose fiscal assistance	8,442	8,369	8,582	6,854	6,390
Net interest	35,441	42,615	52,512	68,734	84,995
On-budget	37,843	44,839	54,851	71,022	87,065
Off-budget	-2,403	-2,224	-2,339	-2,288	-2,071
Allowances					
Undistributed offsetting receipts	-15,720	-17,476	-19,942	-28,041	-26,099
On-budget	-14,660	-16,362	-18,738	-26,611	-24,453
Off-budget	-1,060	-1,114	-1,204	-1,430	-1,646

See next page for continuation of table.

TABLE B-74.—*Federal receipts, outlays, and debt, fiscal years 1978–87*—Continued

[Millions of dollars; fiscal years]

Description	Actual			Estimates	
	1983	1984	1985	1986	1987
RECEIPTS AND OUTLAYS:					
Total receipts	600,562	666,457	734,057	777,139	850.372
Total outlays	808,327	851,781	946,323	979,928	994,002
Total surplus or deficit (–)	–207,764	–185,324	–212,266	–202,789	–143,630
On-budget receipts	453,242	500,382	547,886	579,201	636,097
On-budget outlays	661,219	685,968	769,515	795,185	795,386
On-budget surplus or deficit (–)	–207,977	–185,586	–221,629	–215,984	–159,288
Off-budget receipts	147,320	166,075	186,170	197,938	214,275
Off-budget outlays	147,108	165,813	176,807	184,743	198,617
Off-budget surplus or deficit (–)	212	262	9,363	13,195	15,658
OUTSTANDING DEBT, END OF PERIOD:					
Gross Federal debt	1,381,886	1,576,748	1,827,470	2,112,011	2,320,630
Held by Government agencies	240,116	264,159	317,612	398,003	464,942
Held by the public	1,141,770	1,312,589	1,509,857	1,714,008	1,855,688
Federal Reserve System	155,527	155,122	169,806		
Other	986,243	1,157,467	1,340,051		
RECEIPTS: ON-BUDGET AND OFF-BUDGET	600,562	666,457	734,057	777,139	850,372
Individual income taxes	288,938	298,415	334,531	353,738	385,984
Corporation income taxes	37,022	56,893	61,331	70,865	86,729
Social insurance taxes and contributions	208,994	239,376	265,163	280,438	302,804
On-budget	61,674	73,301	78,992	82,500	88,529
Off-budget	147,320	166,075	186,171	197,938	214,275
Excise taxes	35,300	37,361	35,992	34,628	35,203
Estate and gift taxes	6,053	6,010	6,422	6,073	5,661
Customs duties	8,655	11,370	12,079	12,404	12,937
Miscellaneous receipts:					
Deposits of earnings by Federal Reserve System	14,492	15,684	17,059	16,532	16,560
All other	1,108	1,347	1,480	2,461	4,494
OUTLAYS: ON-BUDGET AND OFF-BUDGET	808,327	851,781	946,323	979,928	994,002
National defense	209,903	227,413	252,748	265,827	282,238
International affairs	11,848	15,876	16,176	17,141	18,619
General science, space, and technology	7,935	8,317	8,627	8,899	9,188
Energy	9,353	7,086	5,685	4,433	4,017
Natural resources and environment	12,672	12,593	13,357	12,905	11,958
Agriculture	22,901	13,613	25,565	25,871	19,541
Commerce and housing credit	6,681	6,917	4,229	3,802	1,359
Transportation	21,334	23,669	25,838	27,106	25,503
Community and regional development	7,560	7,673	7,680	7,922	6,525
Education, training, employment, and social services	26,606	27,579	29,342	30,671	27,447
Health	28,641	30,417	33,542	35,669	34,997
Medicare	52,588	57,540	65,822	68,661	70,234
Income security	122,598	112,668	128,200	118,093	118,374
Social security	170,724	178,223	188,623	200,053	212,213
On-budget	19,993	7,056	5,189	8,050	5,702
Off-budget	150,731	171,167	183,434	192,004	206,510
Veterans benefits and services	24,846	25,614	26,352	26,619	26,420
Administration of justice	5,099	5,660	6,277	6,788	6,948
General government	4,789	5,053	5,228	6,270	6,060
General purpose fiscal assistance	6,452	6,768	6,353	6,236	1,739
Net interest	89,774	111,058	129,436	142,740	147,996
On-budget	91,619	114,368	133,554	147,158	152,713
Off-budget	–1,845	–3,310	–4,118	–4,418	–4,716
Allowances					754
Undistributed offsetting receipts	–33,976	–31,957	–32,759	–35,776	–38,128
On-budget	–32,198	–29,913	–30,250	–32,933	–34,951
Off-budget	–1,778	–2,044	–2,509	–2,843	–3,177

Note.—Through fiscal year 1976, the fiscal year was on a July 1–June 30 basis. Beginning October 1976 (fiscal year 1977), the fiscal year is on an October 1–September 30 basis. The 3-month period from July 1, 1976 through September 30, 1976 is a separate fiscal period known as the transition quarter.

Refunds of receipts are excluded from receipts and outlays.

See "Budget of the United States Government, Fiscal Year 1987" for additional information.

Sources: Department of the Treasury and Office of Management and Budget.

TABLE B–75.—*Relation of Federal Government receipts and expenditures in the national income and product accounts to the budget, fiscal years 1985–87*

[Billions of dollars; fiscal years]

Receipts and expenditures	1985	Estimate	
		1986	1987
RECEIPTS			
Total on-budget and off-budget receipts	734.1	777.1	850.4
Government contributions for employee retirement (grossing)	32.4	33.9	36.0
Other netting and grossing	14.6	13.7	17.4
Timing adjustments	−6.4	1.3	3.2
Geographic exclusions	−1.9	−1.9	−1.9
Other	0.3	0.1	0.1
Federal sector, national income and product accounts, receipts	773.1	824.2	905.2
EXPENDITURES			
Total on-budget and off-budget outlays	946.3	979.9	994.0
Lending and financial transactions	−25.3	−10.5	−6.3
Government contributions for employee retirement (grossing)	32.4	33.9	36.0
Other netting and grossing	14.6	13.7	17.4
Defense timing adjustment	1.3	3.5	7.0
Bonuses on Outer Continental Shelf land leases	2.0	1.9	1.6
Geographic exclusions	−5.3	−5.4	−5.4
Other	−2.8	−1.1	−0.6
Federal sector, national income and product accounts, expenditures	963.2	1,015.9	1,043.7

Note.—See Note, Table B–73.

See Special Analysis B, "Special Analyses, Budget of the United States Government, Fiscal Year 1987" for description of these categories.

Sources: Department of Commerce (Bureau of Economic Analysis), Department of the Treasury, and Office of Management and Budget.

TABLE B-76.—*Federal and State and local government receipts and expenditures, national income and product accounts, 1929–85*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Calendar year or quarter	Total government			Federal Government			State and local government		
	Receipts	Expenditures	Surplus or deficit (−), national income and product accounts	Receipts	Expenditures	Surplus or deficit (−), national income and product accounts	Receipts	Expenditures	Surplus or deficit (−), national income and product accounts
1929	11.3	10.3	1.0	3.8	2.7	1.2	7.6	7.8	−0.2
1933	9.4	10.7	−1.4	2.7	4.0	−1.3	7.2	7.2	−.1
1939	15.4	17.6	−2.2	6.8	9.0	−2.2	9.6	9.6	.0
1940	17.8	18.5	−.7	8.7	10.0	−1.3	10.0	9.3	.6
1941	25.0	28.8	−3.8	15.5	20.5	−5.1	10.4	9.1	1.3
1942	32.7	64.1	−31.4	23.0	56.1	−33.1	10.6	8.8	1.8
1943	49.2	93.4	−44.2	39.3	85.9	−46.6	10.9	8.4	2.4
1944	51.2	103.1	−51.8	41.1	95.6	−54.5	11.1	8.5	2.7
1945	53.4	92.9	−39.5	42.7	84.7	−42.1	11.6	9.0	2.6
1946	52.6	47.2	5.4	40.7	37.2	3.5	13.0	11.1	1.9
1947	57.8	43.4	14.4	44.1	30.8	13.4	15.4	14.4	1.0
1948	59.6	51.1	8.4	43.9	35.5	8.3	17.7	17.6	.1
1949	56.6	60.0	−3.4	39.4	42.0	−2.6	19.5	20.2	−.7
1950	69.4	61.4	8.0	50.4	41.2	9.2	21.3	22.5	−1.2
1951	85.6	79.5	6.1	64.6	58.1	6.5	23.4	23.9	−.4
1952	90.5	94.3	−3.8	67.7	71.4	−3.7	25.4	25.5	−.0
1953	95.0	102.0	−7.0	70.4	77.6	−7.1	27.4	27.3	.1
1954	90.4	97.5	−7.1	64.2	70.3	−6.0	29.0	30.2	−1.1
1955	101.6	98.5	3.1	73.1	68.6	4.4	31.7	32.9	−1.3
1956	110.2	105.0	5.2	78.5	72.5	6.1	35.0	35.9	−.9
1957	116.7	115.8	.9	82.5	80.2	2.3	38.5	39.8	−1.4
1958	115.7	128.3	−12.6	79.3	89.6	−10.3	42.0	44.4	−2.4
1959	130.3	131.9	−1.6	90.6	91.7	−1.1	46.6	47.0	−.4
1960	140.4	137.3	3.1	96.9	93.9	3.0	50.0	49.9	.1
1961	145.9	150.1	−4.3	99.0	102.9	−3.9	54.1	54.5	−.4
1962	157.9	161.6	−3.8	107.2	111.4	−4.2	58.6	58.2	.5
1963	169.8	169.1	.7	115.6	115.3	.3	63.4	62.9	.5
1964	175.6	177.8	−2.3	116.2	119.5	−3.3	69.8	68.8	1.0
1965	190.2	189.6	.5	125.8	125.3	.5	75.5	75.5	−.0
1966	214.4	215.6	−1.3	143.5	145.3	−1.8	85.2	84.7	.5
1967	230.8	245.0	−14.2	152.6	165.8	−13.2	94.1	95.2	−1.1
1968	266.2	272.2	−6.0	176.9	182.9	−6.0	107.9	107.8	.1
1969	300.1	290.2	9.9	199.7	191.3	8.4	120.8	119.3	1.5
1970	306.8	317.4	−10.6	195.4	207.8	−12.4	135.8	134.0	1.8
1971	327.3	346.8	−19.5	202.7	224.8	−22.0	153.6	151.0	2.6
1972	374.0	377.3	−3.4	232.2	249.0	−16.8	179.3	165.8	13.5
1973	419.6	411.7	7.9	263.7	269.3	−5.6	196.4	182.9	13.5
1974	463.1	467.4	−4.3	293.9	305.5	−11.6	213.1	205.9	7.2
1975	480.0	544.9	−64.9	294.9	364.2	−69.4	239.6	235.2	4.5
1976	549.1	587.5	−38.4	340.1	393.7	−53.5	270.1	254.9	15.2
1977	616.6	635.7	−19.1	384.1	430.1	−46.0	300.1	273.2	26.9
1978	694.4	694.8	−.4	441.4	470.7	−29.3	330.3	301.3	28.9
1979	779.8	768.3	11.5	505.0	521.1	−16.1	355.3	327.7	27.6
1980	855.1	889.6	−34.5	553.8	615.1	−61.3	390.0	363.2	26.8
1981	977.2	1,006.9	−29.7	639.5	703.3	−63.8	425.6	391.4	34.1
1982	1,000.8	1,111.6	−110.8	635.3	781.2	−145.9	449.4	414.3	35.1
1983	1,059.6	1,190.4	−130.8	658.1	837.5	−179.4	487.7	439.1	48.6
1984	1,171.3	1,279.8	−108.5	725.1	898.0	−172.9	539.8	475.4	64.4
1985 ᵖ	1,262.2	1,401.2	−139.0	785.7	983.0	−197.3	575.4	517.1	58.3
1982: I	991.1	1,067.0	−76.0	636.7	745.9	−109.2	437.2	404.0	33.2
II	1,003.1	1,080.8	−77.7	641.1	754.0	−112.9	446.8	411.5	35.2
III	1,000.7	1,123.2	−122.5	630.3	789.1	−158.8	453.7	417.4	36.3
IV	1,008.4	1,175.3	−166.8	633.1	835.7	−202.6	459.8	424.1	35.8
1983: I	1,017.4	1,167.4	−150.0	636.3	824.2	−187.9	466.9	429.0	37.9
II	1,061.3	1,185.1	−123.8	665.2	835.8	−170.6	481.8	435.1	46.8
III	1,069.2	1,196.2	−127.0	659.7	839.4	−179.7	496.6	443.9	52.7
IV	1,090.6	1,212.8	−122.2	671.1	850.6	−179.5	505.7	448.5	57.2
1984: I	1,143.6	1,237.4	−93.8	709.4	867.2	−157.8	525.5	461.5	64.0
II	1,166.3	1,263.6	−97.3	721.8	884.9	−163.0	537.4	471.7	65.7
III	1,176.3	1,292.3	−116.0	727.1	905.2	−178.1	542.2	480.1	62.1
IV	1,198.9	1,325.7	−126.8	742.1	934.7	−192.7	554.1	488.3	65.8
1985: I	1,254.4	1,353.9	−99.4	789.7	952.4	−162.6	560.5	497.2	63.2
II	1,227.3	1,379.2	−151.9	754.9	964.0	−209.1	570.0	512.7	57.3
III	1,271.8	1,416.3	−144.5	790.7	992.0	−201.3	581.8	524.9	56.9
IV ᵖ	....	1,455.6	....	....	1,023.4	....	....	533.6	....

Note.—Federal grants-in-aid to State and local governments are reflected in Federal expenditures and State and local receipts. Total government receipts and expenditures have been adjusted to eliminate this duplication.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–77.—*Federal and State and local government receipts and expenditures, national income and product accounts, by major type, 1929–85*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Receipts					Expenditures								Surplus or deficit (–), national income and product accounts	Addendum: Grants-in-aid to State and local governments
									Net interest paid						
	Total	Personal tax and nontax receipts	Corporate profits tax accruals	Indirect business tax and nontax accruals	Contributions for social insurance	Total [1]	Purchases of goods and services	Transfer payments	Total	Interest paid	Less: Interest received by government	Less: Dividends received by government	Subsidies less current surplus of government enterprises		
1929	11.3	2.6	1.4	7.1	0.3	10.3	8.9	1.0	0.7	....	....	....	−0.2	1.0	0.1
1933	9.4	1.4	.5	7.1	.3	10.7	8.3	1.5	1.0	....	....	....	.0	−1.4	.5
1939	15.4	2.4	1.4	9.4	2.2	17.6	13.6	2.6	1.1	....	....	....	.4	−2.2	1.0
1940	17.8	2.6	2.8	10.1	2.4	18.5	14.2	2.7	1.2	....	....	....	.4	−.7	.9
1941	25.0	3.3	7.6	11.3	2.8	28.8	25.0	2.6	1.2	....	....	....	.1	-3.8	.8
1942	32.7	5.9	11.4	11.8	3.5	64.0	59.8	2.7	1.4	....	....	....	.1	−31.4	.9
1943	49.2	17.8	14.1	12.8	4.6	93.3	88.9	2.4	1.9	....	....	....	.1	−44.1	.9
1944	51.2	18.9	12.9	14.2	5.2	103.1	97.1	3.0	2.4	....	....	....	.6	−51.8	.9
1945	53.4	20.8	10.7	15.5	6.3	92.9	83.0	6.0	3.2	....	....	....	.7	−39.5	.9
1946	52.6	18.7	9.1	17.1	7.7	47.2	29.1	13.1	4.1	....	....	....	.9	5.4	1.1
1947	57.8	21.4	11.3	18.4	6.7	43.4	26.4	13.1	4.2	....	....	....	−.2	14.4	1.7
1948	59.6	21.0	12.4	20.1	6.0	51.1	32.6	14.5	4.2	....	....	....	−.1	8.4	2.0
1949	56.6	18.5	10.2	21.3	6.6	60.0	39.0	16.9	4.3	....	....	....	−.3	−3.4	2.2
1950	69.4	20.6	17.9	23.4	7.4	61.4	38.8	18.0	4.4	....	....	....	.1	8.0	2.3
1951	85.6	28.9	22.6	25.3	8.8	79.5	60.4	14.8	4.5	....	....	....	−.1	6.1	2.5
1952	90.5	34.0	19.4	27.7	9.3	94.3	75.8	14.3	4.5	....	....	....	−.3	−3.8	2.6
1953	95.0	35.5	20.3	29.7	9.6	102.0	82.8	15.1	4.6	....	....	....	−.5	−7.0	2.8
1954	90.4	32.5	17.6	29.6	10.6	97.5	76.0	17.1	4.7	....	....	....	−.3	−7.1	2.9
1955	101.6	35.4	22.0	32.2	12.0	98.5	75.3	18.5	4.7	....	....	....	.0	3.1	3.1
1956	110.2	39.7	22.0	35.0	13.5	105.0	79.7	19.4	5.2	....	....	....	.7	5.2	3.3
1957	116.7	42.4	21.4	37.4	15.5	115.8	87.3	22.2	5.6	....	....	....	.7	.9	4.2
1958	115.7	42.2	19.0	38.6	15.9	128.3	95.4	26.5	5.4	....	....	....	1.1	−12.6	5.6
1959	130.3	46.1	23.6	41.7	18.8	131.9	97.9	27.6	6.3	....	....	....	.1	1.6	6.8
1960	140.4	50.5	22.7	45.3	21.9	137.3	100.6	29.4	6.9	10.1	3.3	....	.4	3.1	6.5
1961	145.9	52.2	22.8	48.0	22.9	150.1	108.4	33.7	6.4	9.9	3.5	....	1.7	−4.3	7.2
1962	157.9	57.0	24.0	51.5	25.4	161.6	118.2	34.8	6.9	10.8	3.9	....	1.8	−3.8	8.0
1963	169.8	60.5	26.2	54.6	28.5	169.1	123.8	36.8	7.4	11.6	4.2	....	1.1	.7	9.1
1964	175.6	58.8	28.0	58.7	30.1	177.8	130.0	38.3	7.9	12.5	4.6	....	1.7	−2.3	10.4
1965	190.2	65.2	30.9	62.5	31.6	189.6	138.6	41.3	8.1	13.2	5.1	....	1.6	.5	11.1
1966	214.4	74.9	33.7	65.2	40.6	215.6	158.6	46.0	8.5	14.5	6.0	....	2.5	−1.3	14.4
1967	230.8	82.4	32.7	70.1	45.5	245.0	179.7	54.7	8.9	15.7	6.8	....	1.6	−14.2	15.9
1968	266.2	97.7	39.4	78.7	50.4	272.2	197.7	62.9	10.3	18.1	7.7	0.1	1.4	−6.0	18.6
1969	300.1	116.3	39.7	86.3	57.9	290.2	207.3	69.7	11.5	19.8	8.3	.2	1.9	9.9	20.3
1970	306.8	116.2	34.4	94.0	62.2	317.4	218.2	84.1	12.4	22.3	9.9	.2	2.9	−10.6	24.4
1971	327.3	117.3	37.7	103.4	68.9	346.8	232.4	99.8	12.5	23.1	10.6	.3	2.6	−19.5	29.0
1972	374.0	142.0	41.9	111.1	79.0	377.3	250.0	111.3	12.9	24.8	11.9	.3	3.7	−3.4	37.5
1973	419.6	152.0	49.3	120.8	97.6	411.7	266.5	127.0	15.2	29.6	14.3	.5	3.5	7.9	40.6
1974	463.1	171.8	51.8	129.0	110.5	467.4	299.1	150.9	16.5	33.6	17.1	.9	1.2	−4.3	43.9
1975	480.0	170.6	50.9	140.0	118.5	544.9	335.0	189.6	18.8	37.7	18.9	.9	2.4	−64.9	54.6
1976	549.1	198.7	64.2	151.7	134.5	587.5	356.9	207.2	23.2	43.6	20.4	.9	1.0	−38.4	61.1
1977	616.6	228.1	73.0	165.7	149.8	635.7	387.3	221.6	25.1	47.9	22.8	1.3	3.0	−19.1	67.5
1978	694.4	261.1	83.5	178.1	171.7	694.8	425.2	239.5	28.2	56.5	28.3	1.7	3.9	−.4	77.3
1979	779.8	304.7	88.0	189.4	197.8	768.3	467.8	268.0	30.8	68.2	37.5	2.0	3.5	11.5	80.5
1980	855.1	340.5	84.8	213.3	216.5	889.6	530.3	319.2	36.3	83.2	46.9	1.9	5.7	−34.5	88.7
1981	977.2	393.3	81.1	251.5	251.2	1,006.9	588.1	362.2	52.2	109.1	56.9	2.3	6.7	−29.7	87.9
1982	1,000.8	409.3	63.1	258.8	269.6	1,111.6	641.7	404.0	60.1	128.3	68.1	2.9	8.7	−110.8	83.9
1983	1,059.6	411.1	75.2	282.5	290.8	1,190.4	675.7	435.1	68.1	145.1	77.1	2.8	13.9	−130.8	86.2
1984	1,171.3	441.8	93.6	310.6	325.2	1,279.8	736.8	448.1	88.4	173.9	85.4	3.5	10.1	−108.5	93.6
1985 ᵖ	1,262.2	493.1	85.7	328.5	354.9	1,401.2	814.6	478.5	102.7	193.8	91.1	4.7	9.9	−139.0	98.9
1982: I	991.1	407.1	64.2	254.5	265.2	1,067.0	622.1	382.7	57.9	122.0	64.1	2.8	6.9	−76.0	82.9
II	1,003.1	414.1	64.0	256.2	268.7	1,080.8	625.7	393.1	59.3	126.3	67.0	2.9	5.6	−77.7	84.7
III	1,000.7	405.0	64.3	260.1	271.3	1,123.2	647.1	410.4	61.9	131.5	69.6	3.0	6.7	−122.5	83.3
IV	1,008.4	411.1	59.8	264.5	273.0	1,175.3	671.8	429.7	61.4	133.2	71.8	3.1	15.4	−166.8	84.5
1983: I	1,017.4	407.4	58.9	267.0	284.1	1,167.4	669.3	428.5	62.1	136.1	74.0	2.8	10.3	−150.0	85.8
II	1,061.3	418.0	73.8	281.1	288.3	1,185.1	673.8	436.8	65.1	140.8	75.8	2.7	10.8	−123.8	85.8
III	1,069.2	404.4	84.1	288.3	292.4	1,196.2	681.1	434.0	70.5	148.7	78.1	2.7	13.0	−127.0	87.1
IV	1,090.6	414.4	84.0	293.7	298.5	1,212.8	678.6	441.0	74.6	155.0	80.4	2.9	21.5	−122.2	86.2
1984: I	1,143.6	423.6	99.1	302.4	318.6	1,237.4	696.5	441.9	80.3	162.7	82.4	3.2	22.0	−93.8	91.3
II	1,166.3	433.6	100.6	308.8	323.2	1,263.6	735.1	444.7	83.3	168.4	85.1	3.4	4.0	−97.3	93.0
III	1,176.3	447.5	87.4	314.0	327.4	1,292.3	747.3	449.3	92.4	178.8	86.3	3.6	6.9	−116.0	93.0
IV	1,198.9	462.4	87.4	317.4	331.7	1,325.7	768.4	456.5	97.7	185.7	88.0	3.8	7.4	−126.8	97.3
1985: I	1,254.4	501.7	83.4	321.3	348.0	1,353.9	777.2	470.2	99.9	188.6	88.6	4.1	10.7	−99.4	95.7
II	1,227.3	462.4	82.3	329.8	352.9	1,379.2	794.8	474.4	103.8	193.1	89.3	4.5	9.5	−151.9	97.6
III	1,271.8	498.2	87.4	329.8	356.4	1,416.3	832.5	483.2	100.9	194.1	93.2	4.8	4.4	−144.5	100.6
IV ᵖ	1,295.2	510.1	89.8	333.0	362.3	1,455.6	853.7	486.0	106.1	199.3	93.2	5.2	14.9	−160.4	101.5

[1] Includes an item for the difference between wage accruals and disbursements, not shown separately.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-78.—*Federal Government receipts and expenditures, national income and product accounts, 1964–87*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Receipts					Expenditures								Surplus or deficit (−), national income and product accounts
	Total	Personal tax and nontax receipts	Corporate profits tax accruals	Indirect business tax and nontax accruals	Contributions for social insurance	Total [1]	Purchases of goods and services		Transfer payments		Grants-in-aid to State and local governments	Net interest paid	Subsidies less current surplus of government enterprises	
							Total	National defense	To persons	To foreigners				
Fiscal: [2]														
1964	116.8	50.7	25.7	15.5	25.0	118.4	67.0	51.5	27.4	2.3	9.8	7.7	4.1	−1.5
1965	121.4	51.4	27.1	16.8	26.0	119.9	65.8	49.4	28.4	2.3	10.9	8.2	4.3	1.4
1966	134.0	57.5	30.8	15.4	30.2	134.3	73.9	55.7	31.8	2.4	12.7	8.7	4.8	−.3
1967	148.1	64.4	30.3	15.7	37.7	156.7	87.6	68.8	37.2	2.3	14.8	9.6	5.2	−8.6
1968	162.1	71.4	33.1	17.0	40.6	174.4	97.0	77.0	42.9	2.2	17.8	10.4	4.1	−12.3
1969	192.5	90.2	36.8	18.6	46.9	187.3	100.3	78.5	48.9	2.3	19.2	12.0	4.7	5.2
1970	198.0	94.0	32.9	19.1	52.0	198.7	99.8	78.2	55.3	2.2	22.6	13.5	5.5	−.7
1971	196.2	87.9	31.9	20.0	56.5	216.8	98.3	75.7	68.1	2.5	26.8	14.1	7.0	−20.5
1972	217.9	100.5	34.2	19.8	63.4	237.1	104.4	76.2	76.5	3.0	32.6	14.0	6.5	−19.2
1973	245.3	107.5	40.9	20.6	76.3	260.4	105.3	77.1	87.6	2.8	40.4	15.7	9.1	−15.2
1974	277.2	122.7	43.4	21.3	89.8	283.9	109.3	78.8	102.3	3.2	41.6	19.6	7.7	−6.8
1975	290.5	127.5	42.1	22.1	98.8	335.7	123.9	86.3	131.9	3.7	48.4	21.7	5.9	−45.3
1976	322.6	137.1	52.1	24.2	109.1	378.9	132.2	91.5	154.3	3.7	57.5	25.1	6.2	−56.3
1977	374.7	165.9	59.0	24.5	125.4	419.6	146.8	99.2	167.1	4.1	66.3	28.5	6.9	−44.8
1978	424.3	186.5	67.8	27.1	142.9	459.9	158.6	106.3	179.3	4.4	74.7	33.5	9.7	−35.6
1979	491.2	222.9	75.7	29.0	163.6	506.4	173.1	117.7	198.5	5.1	79.1	40.7	9.9	−15.2
1980	538.6	250.7	70.2	35.3	182.3	589.0	199.9	137.2	235.4	5.8	86.7	50.8	10.4	−50.4
1981	623.8	289.6	69.4	53.4	211.4	682.4	231.8	160.7	274.6	6.7	90.1	66.7	12.5	−58.5
1982	643.3	310.0	52.1	50.0	231.1	755.9	264.4	187.3	305.6	7.2	83.4	82.2	13.0	−112.6
1983	644.6	292.9	54.5	50.2	247.0	833.5	288.2	211.3	339.7	7.7	85.7	90.6	21.2	−188.9
1984	710.1	304.0	73.6	54.9	277.6	875.6	299.5	230.8	342.3	9.9	90.7	109.7	23.5	−165.5
1985	773.1	345.2	67.6	56.4	304.0	963.2	342.2	255.7	359.9	13.1	97.8	128.7	21.4	−190.1
1986 [3]	823.2	360.1	84.8	55.8	322.5	1,015.9	358.6	269.9	378.4	15.5	102.6	139.8	21.0	−192.7
1987 [3]	905.2	392.1	104.1	60.7	348.3	1,043.7	372.7	289.4	393.8	14.1	93.9	146.1	23.1	−138.6
Calendar:														
1964	116.2	48.6	26.1	16.1	25.4	119.5	66.4	50.4	27.9	2.3	10.4	8.0	4.5	−3.3
1965	125.8	53.9	28.9	16.4	26.6	125.3	68.7	51.0	30.3	2.3	11.1	8.4	4.6	.5
1966	143.5	61.7	31.4	15.5	34.9	145.3	80.4	62.0	33.5	2.4	14.4	9.2	5.5	−1.8
1967	152.6	67.5	30.0	16.2	38.9	165.8	92.7	73.4	40.2	2.4	15.9	9.8	4.7	−13.2
1968	176.9	79.7	36.1	17.9	43.2	182.9	100.1	79.1	46.2	2.3	18.6	11.3	4.5	−6.0
1969	199.7	95.1	36.1	18.9	49.6	191.3	100.0	78.9	50.8	2.2	20.3	12.7	5.2	8.4
1970	195.4	92.6	30.6	19.2	52.9	207.8	98.8	76.8	61.6	2.3	24.4	14.1	6.5	−12.4
1971	202.7	90.3	33.5	20.3	58.7	224.8	99.8	74.1	73.0	2.7	29.0	13.8	6.3	−22.0
1972	232.2	108.2	36.6	19.9	67.5	249.0	105.8	77.4	80.9	2.9	37.5	14.4	7.9	−16.8
1973	263.7	114.7	43.3	21.1	84.6	269.3	106.4	77.5	93.7	2.9	40.6	18.0	7.8	−5.6
1974	293.9	131.3	45.1	21.6	95.9	305.5	116.2	82.6	115.0	3.6	43.9	20.7	5.6	−11.6
1975	294.9	125.9	43.6	23.8	101.6	364.2	129.2	89.6	146.8	4.0	54.6	23.0	6.9	−69.4
1976	340.1	147.3	54.6	23.3	115.0	393.7	136.3	93.4	159.3	4.4	61.1	26.8	5.8	−53.5
1977	384.1	169.8	61.6	25.0	127.7	430.1	151.1	100.9	170.1	4.2	67.5	29.1	8.2	−46.0
1978	441.4	194.9	71.4	28.0	147.0	470.7	161.8	108.9	182.4	4.7	77.3	35.2	9.5	−29.3
1979	505.0	231.0	74.4	29.3	170.3	521.1	178.0	121.9	205.6	5.2	80.5	42.5	9.2	−16.1
1980	553.8	257.9	70.3	38.8	186.8	615.1	208.1	142.7	247.0	6.5	88.7	53.3	11.5	−61.3
1981	639.5	298.9	65.7	56.2	218.8	703.3	242.2	167.5	282.1	6.5	87.9	72.4	12.3	−63.8
1982	635.3	304.5	49.0	48.1	233.7	781.2	272.7	193.8	316.3	7.8	83.9	84.6	16.0	−145.9
1983	658.1	295.0	59.3	51.6	252.2	837.5	284.8	215.7	340.0	8.5	86.2	94.3	23.2	−179.4
1984	725.1	311.3	74.4	55.8	283.6	898.0	312.9	237.0	344.4	10.7	93.6	115.5	21.1	−172.9
1985 p	785.7	351.1	67.6	57.0	309.9	983.0	353.9	262.0	366.4	13.3	98.9	129.0	21.3	197.3
1983: I	636.3	297.1	46.5	46.3	246.5	824.2	287.1	209.4	338.2	6.2	85.8	88.0	18.8	−187.9
II	665.2	304.2	58.2	52.8	250.1	835.8	287.0	214.5	343.6	7.2	85.8	91.1	19.8	−170.6
III	659.7	286.2	66.4	53.7	253.4	839.4	286.0	215.8	338.2	8.4	87.1	96.8	22.5	−179.7
IV	671.1	292.5	66.1	53.6	258.8	850.6	279.2	222.9	340.1	12.2	86.2	101.2	31.6	−179.5
1984: I	709.4	297.8	78.9	54.6	278.1	867.2	285.6	228.3	342.5	8.1	91.3	107.2	32.7	−157.8
II	721.8	303.9	80.1	55.8	282.0	884.9	314.8	235.8	343.5	8.3	93.0	110.4	15.1	−163.0
III	727.1	315.7	69.4	56.7	285.4	905.2	318.5	236.2	345.3	11.0	93.0	119.5	18.0	−178.1
IV	742.1	327.8	69.2	56.2	288.9	934.7	332.9	247.5	346.4	15.5	97.3	124.8	18.5	−192.7
1985: I	789.7	363.9	65.9	55.5	304.4	952.4	334.4	249.5	362.9	11.2	95.7	126.4	21.9	−162.6
II	754.9	321.3	65.0	60.2	308.4	964.0	337.8	256.0	364.2	12.5	97.6	130.1	20.9	−209.1
III	790.7	355.4	68.9	55.4	311.0	992.0	364.8	269.9	368.8	14.7	100.6	127.1	15.9	−201.3
IV p	....	363.8	....	57.0	315.9	1,023.4	378.6	272.5	369.7	14.7	101.5	132.5	26.6	....

[1] Includes an item for the difference between wage accruals and disbursements, not shown separately.

[2] Through fiscal year 1976, the fiscal year was on a July 1–June 30 basis; beginning October 1976 (fiscal year 1977), the fiscal year is on an October 1–September 30 basis. The 3-month period from July 1, 1976 through September 30, 1976 is a separate fiscal period known as the transition quarter.

[3] Estimates.

Sources: Department of Commerce (Bureau of Economic Analysis) and Office of Management and Budget.

TABLE B–79.—*State and local government receipts and expenditures, national income and product accounts, 1946–85*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Calendar year or quarter	Receipts						Expenditures					Surplus or deficit (−), national income and product accounts
	Total	Personal tax and nontax receipts	Corporate profits tax accruals	Indirect business tax and nontax accruals	Contributions for social insurance	Federal grants-in-aid	Total [1]	Purchases of goods and services	Transfer payments to persons	Net interest paid less dividends received	Subsidies less current surplus of government enterprises	
1946	13.0	1.5	0.5	9.3	0.6	1.1	11.1	9.9	1.7	0.2	−0.7	1.9
1947	15.4	1.7	.6	10.7	.7	1.7	14.4	12.8	2.3	.1	−.8	1.0
1948	17.7	2.1	.7	12.2	.8	2.0	17.6	15.3	3.0	.1	−.8	.1
1949	19.5	2.4	.6	13.3	.9	2.2	20.2	18.0	3.0	.1	−.9	−.7
1950	21.3	2.5	.8	14.6	1.1	2.3	22.5	19.8	3.6	.1	−.9	−1.2
1951	23.4	2.8	.9	15.9	1.4	2.5	23.9	21.8	3.1	.0	−1.0	−.4
1952	25.4	3.0	.8	17.4	1.6	2.6	25.5	23.1	3.5	.0	−1.1	−.0
1953	27.4	3.2	.8	18.8	1.7	2.8	27.3	24.8	3.6	.0	−1.2	.1
1954	29.0	3.5	.8	19.9	2.0	2.9	30.2	27.7	3.8	.1	−1.3	−1.1
1955	31.7	3.9	1.0	21.6	2.1	3.1	32.9	30.3	4.0	.1	−1.5	−1.3
1956	35.0	4.5	1.0	23.8	2.3	3.3	35.9	33.3	4.2	.1	−1.6	−.9
1957	38.5	5.0	1.0	25.7	2.6	4.2	39.8	36.9	4.6	.1	−1.7	−1.4
1958	42.0	5.4	1.0	27.2	2.8	5.6	44.4	40.8	5.1	.1	−1.7	−2.4
1959	46.6	6.2	1.2	29.3	3.1	6.8	47.0	43.3	5.6	.1	−2.0	−.4
1960	50.0	6.8	1.2	32.0	3.4	6.5	49.9	46.1	5.9	.1	−2.2	.1
1961	54.1	7.5	1.3	34.4	3.7	7.2	54.5	50.2	6.5	.1	−2.3	−.4
1962	58.6	8.4	1.5	37.0	3.9	8.0	58.2	53.5	7.0	.2	−2.5	.5
1963	63.4	9.0	1.7	39.4	4.2	9.1	62.9	58.1	7.5	.1	−2.8	.5
1964	69.8	10.2	1.8	42.6	4.7	10.4	68.8	63.5	8.2	−.1	−2.8	1.0
1965	75.5	11.3	2.0	46.1	5.0	11.1	75.5	69.9	8.8	−.3	−3.0	−.0
1966	85.2	13.2	2.2	49.7	5.7	14.4	84.7	78.2	10.1	−.6	−3.0	.5
1967	94.1	15.0	2.6	53.9	6.7	15.9	95.2	87.0	12.1	−.9	−3.1	−1.1
1968	107.9	18.0	3.3	60.8	7.2	18.6	107.8	97.6	14.5	−1.1	−3.2	.1
1969	120.8	21.1	3.6	67.4	8.3	20.3	119.3	107.2	16.7	−1.3	−3.3	1.5
1970	135.8	23.6	3.7	74.8	9.2	24.4	134.0	119.4	20.1	−2.0	−3.6	1.8
1971	153.6	27.0	4.3	83.1	10.2	29.0	151.0	132.5	24.0	−1.6	−3.7	2.6
1972	179.3	33.8	5.3	91.2	11.5	37.5	165.8	144.2	27.5	−1.8	−4.2	13.5
1973	196.4	37.3	6.0	99.6	13.0	40.6	182.9	160.1	30.4	−3.3	−4.3	13.5
1974	213.1	40.5	6.7	107.4	14.6	43.9	205.9	182.9	32.3	−5.0	−4.4	7.2
1975	239.6	44.7	7.3	116.2	16.8	54.6	235.2	205.9	38.9	−5.1	−4.5	4.5
1976	270.1	51.5	9.6	128.4	19.5	61.1	254.9	220.6	43.6	−4.5	−4.8	15.2
1977	300.1	58.3	11.4	140.7	22.1	67.5	273.2	236.2	47.4	−5.3	−5.1	26.9
1978	330.3	66.2	12.1	150.0	24.7	77.3	301.3	263.4	52.4	−8.7	−5.6	28.9
1979	355.3	73.7	13.6	160.1	27.4	80.5	327.7	289.9	57.2	−13.8	−5.7	27.6
1980	390.0	82.6	14.5	174.5	29.7	88.7	363.2	322.2	65.7	−18.9	−5.8	26.8
1981	425.6	94.5	15.4	195.3	32.5	87.9	391.4	345.9	73.6	−22.4	−5.6	34.1
1982	449.4	104.9	14.0	210.8	35.8	83.9	414.3	369.0	79.9	−27.4	−7.3	35.1
1983	487.7	116.1	15.9	231.0	38.6	86.2	439.1	390.9	86.6	−29.0	−9.3	48.6
1984	539.8	130.5	19.2	254.8	41.6	93.6	475.4	423.9	93.0	−30.5	−11.0	64.4
1985 ᵖ	575.4	142.0	18.1	271.4	45.0	98.9	517.1	460.7	98.8	−31.0	−11.4	58.3
1982: I	437.2	101.1	14.4	204.1	34.7	82.9	404.0	359.2	76.7	−25.3	−6.6	33.2
II	446.8	103.4	14.1	209.0	35.5	84.7	411.5	366.4	79.2	−27.1	−7.1	35.2
III	453.7	106.9	14.2	213.0	36.3	83.3	417.4	371.8	81.4	−28.2	−7.5	36.3
IV	459.8	108.1	13.4	216.9	36.9	84.5	424.1	378.7	82.3	−28.9	−8.0	35.8
1983: I	466.9	110.2	12.5	220.8	37.6	85.8	429.0	382.2	84.1	−28.7	−8.5	37.9
II	481.8	113.9	15.6	228.3	38.3	85.8	435.1	386.9	86.0	−28.8	−9.0	46.8
III	496.6	118.2	17.7	234.6	39.0	87.1	443.9	395.1	87.4	−29.0	−9.6	52.7
IV	505.7	121.9	17.8	240.1	39.7	86.2	448.5	399.4	88.7	−29.5	−10.1	57.2
1984: I	525.5	125.7	20.2	247.8	40.5	91.3	461.5	410.9	91.4	−30.1	−10.7	64.0
II	537.4	129.6	20.5	253.0	41.2	93.0	471.7	420.3	92.9	−30.4	−11.0	65.7
III	542.2	131.8	18.1	257.3	42.0	93.0	480.1	428.8	93.1	−30.6	−11.2	62.1
IV	554.1	134.6	18.1	261.2	42.8	97.3	488.3	435.5	94.7	−30.8	−11.1	65.8
1985: I	560.5	137.8	17.5	265.8	43.6	95.7	497.2	442.8	96.1	−30.6	−11.2	63.2
II	570.0	141.1	17.3	269.5	44.5	97.6	512.7	457.1	97.7	−30.8	−11.3	57.3
III	581.8	142.9	18.5	274.4	45.4	100.6	524.9	467.7	99.7	−31.0	−11.5	56.9
IV ᵖ	....	146.3	....	276.1	46.3	101.5	533.6	475.2	101.7	−31.6	−11.6	....

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[1] Includes an item for the difference between wage accruals and disbursements, not shown separately.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–80.—*State and local government revenues and expenditures, selected fiscal years, 1927–84*

[Millions of dollars]

Fiscal year [1]	General revenues by source [2]							General expenditures by function [2]				
	Total	Property taxes	Sales and gross receipts taxes	Individual income taxes	Corporation net income taxes	Revenue from Federal Government	All other [3]	Total	Education	Highways	Public welfare	All other [4]
1927	7,271	4,730	470	70	92	116	1,793	7,210	2,235	1,809	151	3,015
1932	7,267	4,487	752	74	79	232	1,643	7,765	2,311	1,741	444	3,269
1934	7,678	4,076	1,008	80	49	1,016	1,449	7,181	1,831	1,509	889	2,952
1936	8,395	4,093	1,484	153	113	948	1,604	7,644	2,177	1,425	827	3,215
1938	9,228	4,440	1,794	218	165	800	1,811	8,757	2,491	1,650	1,069	3,547
1940	9,609	4,430	1,982	224	156	945	1,872	9,229	2,638	1,573	1,156	3,862
1942	10,418	4,537	2,351	276	272	858	2,123	9,190	2,586	1,490	1,225	3,889
1944	10,908	4,604	2,289	342	451	954	2,269	8,863	2,793	1,200	1,133	3,737
1946	12,356	4,986	2,986	422	447	855	2,661	11,028	3,356	1,672	1,409	4,591
1948	17,250	6,126	4,442	543	592	1,861	3,685	17,684	5,379	3,036	2,099	7,170
1950	20,911	7,349	5,154	788	593	2,486	4,541	22,787	7,177	3,803	2,940	8,867
1952	25,181	8,652	6,357	998	846	2,566	5,763	26,098	8,318	4,650	2,788	10,342
1953	27,307	9,375	6,927	1,065	817	2,870	6,252	27,910	9,390	4,987	2,914	10,619
1954	29,012	9,967	7,276	1,127	778	2,966	6,897	30,701	10,557	5,527	3,060	11,557
1955	31,073	10,735	7,643	1,237	744	3,131	7,584	33,724	11,907	6,452	3,168	12,197
1956	34,667	11,749	8,691	1,538	890	3,335	8,465	36,711	13,220	6,953	3,139	13,399
1957	38,164	12,864	9,467	1,754	984	3,843	9,252	40,375	14,134	7,816	3,485	14,940
1958	41,219	14,047	9,829	1,759	1,018	4,865	9,699	44,851	15,919	8,567	3,818	16,547
1959	45,306	14,983	10,437	1,994	1,001	6,377	10,516	48,887	17,283	9,592	4,136	17,876
1960	50,505	16,405	11,849	2,463	1,180	6,974	11,634	51,876	18,719	9,428	4,404	19,325
1961	54,037	18,002	12,463	2,613	1,266	7,131	12,563	56,201	20,574	9,844	4,720	21,063
1962	58,252	19,054	13,494	3,037	1,308	7,871	13,489	60,206	22,216	10,357	5,084	22,549
1963	62,890	20,089	14,456	3,269	1,505	8,722	14,850	64,816	23,776	11,136	5,481	24,423
1962–63	62,269	19,833	14,446	3,267	1,505	8,663	14,556	63,977	23,729	11,150	5,420	23,678
1963–64	68,443	21,241	15,762	3,791	1,695	10,002	15,951	69,302	26,286	11,664	5,766	25,586
1964–65	74,000	22,583	17,118	4,090	1,929	11,029	17,250	74,678	28,563	12,221	6,315	27,579
1965–66	83,036	24,670	19,085	4,760	2,038	13,214	19,269	82,843	33,287	12,770	6,757	30,029
1966–67	91,197	26,047	20,530	5,825	2,227	15,370	21,197	93,350	37,919	13,932	8,218	33,281
1967–68	101,264	27,747	22,911	7,308	2,518	17,181	23,598	102,411	41,158	14,481	9,857	36,915
1968–69	114,550	30,673	26,519	8,908	3,180	19,153	26,118	116,728	47,238	15,417	12,110	41,963
1969–70	130,756	34,054	30,322	10,812	3,738	21,857	29,971	131,332	52,718	16,427	14,679	47,508
1970–71	144,927	37,852	33,233	11,900	3,424	26,146	32,374	150,674	59,413	18,095	18,226	54,940
1971–72	167,541	42,877	37,518	15,227	4,416	31,342	36,162	168,550	65,814	19,021	21,117	62,597
1972–73	190,214	45,283	42,047	17,994	5,425	39,256	40,210	181,357	69,714	18,615	23,582	69,446
1973–74	207,670	47,705	46,098	19,491	6,015	41,820	46,541	198,959	75,833	19,946	25,085	78,096
1974–75	228,171	51,491	49,815	21,454	6,642	47,034	51,735	230,721	87,858	22,528	28,155	92,180
1975–76	256,176	57,001	54,547	24,575	7,273	55,589	57,191	256,731	97,216	23,907	32,604	103,004
1976–77	285,157	62,527	60,641	29,246	9,174	62,444	61,124	274,215	102,780	23,058	35,906	112,472
1977–78	315,960	66,422	67,596	33,176	10,738	69,592	68,436	296,983	110,758	24,609	39,140	122,476
1978–79	343,278	64,944	74,247	36,932	12,128	75,164	79,864	327,517	119,448	28,440	41,898	137,731
1979–80	382,322	68,499	79,927	42,080	13,321	83,029	95,466	369,086	133,211	33,311	47,288	155,277
1980–81	423,404	74,969	85,971	46,426	14,143	90,294	111,599	407,449	145,784	34,603	54,121	172,941
1981–82	457,654	82,067	93,613	50,738	15,028	87,282	128,926	436,896	154,282	34,520	57,996	190,098
1982–83	486,878	89,253	100,247	55,129	14,258	89,983	138,009	466,421	163,876	36,655	60,484	205,406
1983–84	542,847	96,457	114,097	64,623	17,047	97,052	153,570	505,006	176,108	39,516	66,431	222,951

[1] Fiscal years not the same for all governments. See Note.

[2] Excludes revenues or expenditures of publicly owned utilities and liquor stores, and of insurance-trust activities. Intergovernmental receipts and payments between State and local governments are also excluded.

[3] Includes licenses and other taxes and charges and miscellaneous revenues.

[4] Includes expenditures for libraries, hospitals, health, social insurance administration, veterans' services, air transportation, water transport and terminals, parking facilities, police protection, fire protection, correction, protective inspection and regulation, sewerage, natural resources, parks and recreation, community development, sanitation other than sewerage, general control, financial administration, general public buildings, interest on general debt and unallocable items.

Note.—Data for fiscal years listed from 1962–63 to 1983–84 are the aggregations of data for government fiscal years which ended in the 12-month period from July 1 to June 30 of those years. Data for 1963 and earlier years include data for government fiscal years ending during that particular calendar year.

Data are not available for intervening years.

Source: Department of Commerce, Bureau of the Census.

TABLE B-81.—*Interest-bearing public debt securities by kind of obligation, 1967–85*

[Millions of dollars]

End of year or month	Total interest-bearing public debt securities	Marketable: Total	Marketable: Treasury bills	Marketable: Treasury notes	Marketable: Treasury bonds	Nonmarketable: Total	Nonmarketable: U.S. savings bonds	Nonmarketable: Foreign government and public series [1]	Nonmarketable: Government account series	Nonmarketable: Other [2]
Fiscal year:										
1967	322,286	[3] 210,672	58,535	49,108	97,418	111,614	51,213	1,514	56,155	2,731
1968	344,401	226,592	64,440	71,073	91,079	117,808	51,712	3,741	59,526	2,828
1969	351,729	226,107	68,356	78,946	78,805	125,623	51,711	4,070	66,790	3,051
1970	369,026	232,599	76,154	93,489	62,956	136,426	51,281	4,755	76,323	4,068
1971	396,289	245,473	86,677	104,807	53,989	150,816	53,003	9,270	82,784	5,759
1972	425,360	257,202	94,648	113,419	49,135	168,158	55,921	18,985	89,598	3,654
1973	456,353	262,971	100,061	117,840	45,071	193,382	59,418	28,524	101,738	3,701
1974	473,238	266,575	105,019	128,419	33,137	206,663	61,921	25,011	115,442	4,289
1975	532,122	315,606	128,569	150,257	36,779	216,516	65,482	23,216	124,173	3,644
1976	619,254	392,581	161,198	191,758	39,626	226,673	69,733	21,500	130,557	4,883
1977	697,629	443,508	156,091	241,692	45,724	254,121	75,411	21,799	140,113	16,797
1978	766,971	485,155	160,936	267,865	56,355	281,816	79,798	21,680	153,271	27,067
1979	819,007	506,693	161,378	274,242	71,073	312,314	80,440	28,115	176,360	27,400
1980	906,402	594,506	199,832	310,903	83,772	311,896	72,727	25,158	189,848	24,164
1981	996,495	683,209	223,388	363,643	96,178	313,286	68,017	20,499	201,052	23,718
1982	1,140,883	824,422	277,900	442,890	103,631	316,461	67,274	14,641	210,462	24,085
1983	1,375,751	1,024,000	340,733	557,525	125,742	351,751	70,024	11,450	234,684	35,593
1984	1,559,570	1,176,556	356,798	661,687	158,070	383,015	72,832	8,806	259,534	41,843
1985	1,821,010	1,360,179	384,220	776,449	199,510	460,831	77,011	6,638	313,928	63,255
1984: Jan	1,435,612	1,081,880	346,888	597,581	137,411	353,732	70,715	10,804	235,045	37,168
Feb	1,455,761	1,100,064	349,461	607,975	142,628	355,697	70,981	9,802	236,988	37,926
Mar	1,452,099	1,097,732	350,230	604,915	142,586	354,368	71,318	9,916	234,640	38,494
Apr	1,484,392	1,123,344	347,259	629,787	146,299	361,047	71,537	9,861	240,864	38,785
May	1,495,393	1,131,252	344,209	635,781	151,262	364,141	71,780	9,009	243,217	40,135
June	1,501,131	1,126,634	343,282	632,120	151,233	374,496	72,042	8,847	253,182	40,425
July	1,536,894	1,159,824	347,431	657,216	155,177	377,070	72,259	9,363	254,915	40,533
Aug	1,558,969	1,184,698	360,447	666,141	158,109	374,271	72,494	8,560	252,197	41,020
Sept	1,559,570	1,176,556	356,798	661,687	158,070	383,015	72,832	8,806	259,534	41,843
Oct	1,609,870	1,207,639	359,066	686,531	162,042	402,231	72,980	8,453	278,187	42,611
Nov	1,629,384	1,225,037	365,208	691,858	167,971	404,347	73,339	8,710	278,407	43,891
Dec	1,660,633	1,247,403	374,369	705,092	167,942	413,230	73,058	9,114	286,199	44,859
1985: Jan	1,677,785	1,259,416	374,471	712,778	172,168	418,369	73,336	9,378	290,527	45,127
Feb	1,696,188	1,274,909	376,760	719,762	178,387	421,279	73,724	8,598	293,292	45,664
Mar	1,695,223	1,271,670	379,477	713,836	178,357	423,554	74,089	9,087	292,219	48,159
Apr	1,730,666	1,300,895	379,851	738,455	182,589	429,771	74,534	8,840	297,355	49,043
May	1,751,838	1,314,308	381,220	745,124	187,963	437,531	74,992	7,663	302,536	52,339
June	1,759,826	1,310,712	381,872	740,910	187,930	449,114	75,426	8,333	310,995	54,359
July	1,798,912	1,343,550	384,462	766,677	192,411	455,362	75,927	8,147	313,956	57,332
Aug	1,806,905	1,347,763	387,345	760,882	199,537	459,142	76,490	7,153	314,849	60,648
Sept	1,821,010	1,360,179	384,220	776,449	199,510	460,831	77,011	6,638	313,928	63,255
Oct	1,829,885	[4] 1,375,619	389,716	777,687	199,470	454,265	77,536	7,156	302,625	66,948
Nov	1,888,844	[4] 1,411,469	397,561	788,611	211,103	477,375	78,115	7,036	319,425	72,799
Dec	1,943,402	[4] 1,437,653	399,893	812,488	211,078	505,749	78,073	7,527	332,174	87,975

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[1] Nonmarketable certificates of indebtedness, notes, bonds, and bills in the Treasury foreign series of dollar-denominated and foreign-currency denominated issues.

[2] Includes depository bonds, retirement plan bonds, Rural Electrification Administration bonds, State and local bonds, and speci issues held only by U.S. Government agencies and trust funds and the Federal home loan banks.

[3] Includes $5,610 million in certificates not shown separately.

[4] Includes Federal Financing Bank securities, not shown separately: $8,747 million in October, and $14,194 million in November and December.

Note.—Through fiscal year 1976, the fiscal year was on a July 1–June 30 basis; beginning October 1976 (fiscal year 1977), the fisca year is on an October 1–September 30 basis.

Source: Department of the Treasury.

TABLE B–82.—*Maturity distribution and average length of marketable interest-bearing public debt securities held by private investors, 1967–85*

End of year or month	Amount outstanding, privately held	Maturity class					Average length	
		Within 1 year	1 to 5 years	5 to 10 years	10 to 20 years	20 years and over		
	Millions of dollars						Years	Months
Fiscal year:								
1967	150,321	56,561	53,584	21,057	6,153	12,968	5	1
1968	159,671	66,746	52,295	21,850	6,110	12,670	4	5
1969	156,008	69,311	50,182	18,078	6,097	12,337	4	2
1970	157,910	76,443	57,035	8,286	7,876	8,272	3	8
1971	161,863	74,803	58,557	14,503	6,357	7,645	3	6
1972	165,978	79,509	57,157	16,033	6,358	6,922	3	3
1973	167,869	84,041	54,139	16,385	8,741	4,564	3	1
1974	164,862	87,150	50,103	14,197	9,930	3,481	2	11
1975	210,382	115,677	65,852	15,385	8,857	4,611	2	8
1976	279,782	151,723	89,151	24,169	8,087	6,652	2	7
1977	326,674	161,329	113,319	33,067	8,428	10,531	2	11
1978	356,501	163,819	132,993	33,500	11,383	14,805	3	3
1979	380,530	181,883	127,574	32,279	18,489	20,304	3	7
1980	463,717	220,084	156,244	38,809	25,901	22,679	3	9
1981	549,863	256,187	182,237	48,743	32,569	30,127	4	0
1982	682,043	314,436	221,783	75,749	33,017	37,058	3	11
1983	862,631	379,579	294,955	99,174	40,826	48,097	4	1
1984	1,017,488	437,941	332,808	130,417	49,664	66,658	4	6
1985	1,185,675	472,661	402,766	159,383	62,853	88,012	4	11
1984: Jan	925,683	399,857	317,869	108,471	46,806	52,680	4	3
Feb	953,274	418,060	323,520	110,595	43,882	57,217	4	3
Mar	942,372	413,070	311,574	116,643	43,868	57,217	4	4
Apr	955,267	408,445	325,657	117,644	43,588	59,933	4	4
May	970,488	413,316	332,509	115,773	47,109	61,781	4	5
June	969,341	415,474	322,719	122,146	47,141	61,861	4	5
July	1,003,260	424,193	343,145	122,928	47,133	65,861	4	5
Aug	1,026,497	444,361	342,249	123,641	49,667	66,579	4	6
Sept	1,017,488	437,941	332,808	130,417	49,664	66,658	4	6
Oct	1,054,403	447,809	354,372	131,895	49,655	70,672	4	5
Nov	1,062,251	447,330	362,598	128,376	52,090	71,857	4	7
Dec	1,081,548	455,801	365,794	136,121	52,068	71,765	4	7
1985: Jan	1,099,857	461,758	372,608	137,280	56,353	71,858	4	6
Feb	1,110,272	462,955	378,690	136,490	54,699	77,438	4	8
Mar	1,106,798	463,882	366,843	143,745	54,722	77,606	4	8
Apr	1,121,977	457,352	385,122	143,704	54,320	81,478	4	8
May	1,145,271	467,260	392,430	145,696	58,372	81,513	4	10
June	1,138,109	465,310	379,046	153,878	58,362	81,513	4	10
July	1,171,662	470,538	401,502	155,237	62,872	81,513	4	9
Aug	1,173,579	473,060	398,089	151,550	62,867	88,013	5	0
Sept	1,185,675	472,661	402,766	159,383	62,853	88,012	4	11
Oct	1,193,376	480,307	407,877	154,326	62,853	88,013	4	10
Nov	1,224,074	492,916	413,960	156,262	66,154	94,782	5	0
Dec	1,237,340	490,217	423,625	163,049	66,003	94,446	5	0

Note.—All issues classified to final maturity.

Through fiscal year 1976, the fiscal year was on a July 1—June 30 basis; beginning October 1976 (fiscal year 1977), the fiscal year is on an October 1—September 30 basis.

Source: Department of the Treasury.

TABLE B–83.—*Estimated ownership of public debt securities, 1976–85*

[Par values;[1] billions of dollars]

End of month	Total public debt securities	Held by Government accounts	Held by Federal Reserve Banks	Held by private investors											
				Total	Commercial banks [2]	Nonbank investors									
						Total	Individuals [3]			Insurance companies	Money market funds	Corporations [5]	State and local governments [6]	Foreign and international [7]	Other investors [8]
							Total	Savings bonds [4]	Other securities						
1976:															
June	620.4	149.6	94.4	376.4	91.4	285.0	96.1	69.6	26.5	14.4	0.8	23.3	33.8	69.8	46.8
Dec	653.5	147.1	97.0	409.5	103.5	306.0	101.6	72.0	29.6	16.2	1.1	23.5	39.8	78.1	45.7
1977:															
June	674.4	151.2	102.2	421.0	102.7	318.3	104.9	74.4	30.5	18.1	.8	22.1	46.8	87.9	37.7
Dec	718.9	154.8	102.8	461.3	98.9	362.4	107.8	76.7	31.1	19.9	.9	18.2	51.9	109.6	54.1
1978:															
June	749.0	161.1	110.1	477.8	97.8	380.0	109.0	79.1	29.9	19.7	1.3	17.3	59.5	119.5	53.7
Dec	789.2	170.0	110.6	508.6	95.0	413.6	114.0	80.7	33.3	20.0	1.5	17.3	64.5	133.1	63.2
1979:															
June	804.9	178.5	109.7	516.6	86.1	430.5	115.5	80.6	34.9	20.9	3.8	18.6	71.2	114.9	85.6
Dec	845.1	187.1	117.5	540.5	88.1	452.4	118.0	79.9	38.1	21.4	5.6	17.0	74.1	119.0	97.3
1980:															
June	877.6	194.9	124.5	558.2	97.4	460.8	116.5	73.4	43.1	22.3	5.3	14.0	78.9	118.2	105.6
Dec	930.2	192.5	121.3	616.4	112.1	504.3	117.1	72.5	44.6	24.0	3.5	19.3	87.9	129.7	122.8
1981:															
Mar	964.5	190.9	119.0	654.6	117.0	537.6	105.2	70.4	34.8	25.6	14.5	17.0	91.8	138.2	145.3
June	971.2	199.9	120.0	651.2	119.7	531.5	107.4	69.2	38.2	26.4	9.0	19.9	96.9	136.6	135.3
Sept	997.9	208.1	124.3	665.4	112.7	552.7	109.7	68.3	41.4	27.6	11.4	18.0	99.8	130.7	155.5
Dec	1,028.7	203.3	131.0	694.5	111.4	583.1	110.8	68.1	42.7	29.0	21.5	17.9	104.3	136.6	163.0
1982:															
Mar	1,061.3	202.5	125.6	733.3	116.1	617.2	112.5	67.5	45.0	32.1	25.7	16.9	108.4	136.1	185.5
June	1,079.6	211.7	127.0	740.9	116.1	624.8	114.1	67.4	46.7	32.5	22.4	17.6	113.6	137.2	187.4
Sept	1,142.0	216.4	134.4	791.2	117.8	673.4	115.6	67.6	48.0	34.8	38.6	21.6	122.4	140.6	199.8
Dec	1,197.1	209.4	139.3	848.4	131.4	717.0	116.5	68.3	48.2	39.1	42.6	24.5	127.8	149.5	217.0
1983:															
Mar	1,244.5	201.2	136.7	906.6	153.2	753.4	116.7	68.8	47.9	43.7	44.8	27.2	137.1	156.2	227.7
June	1,319.6	229.3	141.7	948.6	171.6	777.0	121.3	69.7	51.6	47.4	28.3	32.8	144.9	160.1	242.2
Sept	1,377.2	239.0	155.4	982.7	176.3	806.4	128.9	70.6	58.4	51.2	22.1	35.9	149.9	160.1	258.3
Dec	1,410.7	236.3	151.9	1,022.6	188.8	833.7	133.4	71.5	61.9	56.7	22.8	39.7	155.1	166.3	259.8
1984:															
Mar	1,463.7	239.8	150.8	1,073.0	189.8	883.2	136.2	72.2	64.0	57.1	19.4	42.6	162.9	166.3	298.7
June	1,512.7	257.6	152.9	1,102.2	182.3	919.9	142.2	72.9	69.3	61.6	14.9	45.3	165.0	171.6	319.3
Sept	1,572.3	263.1	155.0	1,154.1	183.0	971.1	142.4	73.7	68.7	73.2	13.6	47.7	....	175.5	....
Dec	1,663.0	289.6	160.9	1,212.5	183.4	1,029.1	143.8	74.5	69.3	82.3	25.9	50.1	....	192.9	....
1985:															
Mar	1,710.7	295.5	161.0	1,254.1	195.0	1,059.1	145.1	75.4	69.7	84.0	26.7	50.9	....	186.4	....
June	1,774.6	313.5	169.1	1,292.0	196.3	1,095.7	148.7	76.7	72.0	....	24.8	52.3	....	200.7	....
Sept	1,823.1	315.2	169.7	1,338.2	196.9	1,141.3	151.3	78.2	73.1	....	22.7	56.5	....	210.2	....

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[1] U.S. savings bonds, series A–F and J, are included at current redemption value.

[2] Includes domestically chartered banks, U.S. branches and agencies of foreign banks, New York investment companies majority owned by foreign banks, and Edge Act corporations owned by domestically chartered and foreign banks.

[3] Includes partnerships and personal trust accounts.

[4] Includes U.S. savings notes. Sales began May 1, 1967, and were discontinued June 30, 1970.

[5] Exclusive of banks and insurance companies.

[6] Includes State and local pension funds.

[7] Consists of the investment of foreign balances and international accounts in the United States.

[8] Includes savings and loan associations, credit unions, nonprofit institutions, mutual savings banks, corporate pension trust funds, dealers and brokers, certain Government deposit accounts, and Government-sponsored agencies.

Source: Department of the Treasury.

CORPORATE PROFITS AND FINANCE

Table B–84.—*Corporate profits with inventory valuation and capital consumption adjustments, 1929–85*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Corporate profits with inventory valuation and capital consumption adjustments	Corporate profits tax liability	Corporate profits after tax with inventory valuation and capital consumption adjustments		
			Total	Dividends	Undistributed profits with inventory valuation and capital consumption adjustments
1929	9.6	1.4	8.2	5.8	2.4
1933	−1.5	.5	−2.1	2.0	−4.1
1939	5.5	1.4	4.0	3.8	.3
1940	8.8	2.8	5.9	4.0	1.9
1941	14.3	7.6	6.7	4.4	2.3
1942	19.7	11.4	8.3	4.3	4.0
1943	24.0	14.1	9.9	4.4	5.5
1944	24.2	12.9	11.2	4.6	6.6
1945	19.7	10.7	9.0	4.6	4.4
1946	17.2	9.1	8.0	5.6	2.5
1947	22.9	11.3	11.7	6.3	5.4
1948	30.3	12.4	17.8	7.0	10.8
1949	28.0	10.2	17.8	7.2	10.6
1950	34.9	17.9	17.0	8.8	8.2
1951	39.9	22.6	17.3	8.5	8.8
1952	37.5	19.4	18.1	8.5	9.6
1953	37.7	20.3	17.4	8.8	8.6
1954	36.6	17.6	19.0	9.1	9.8
1955	47.1	22.0	25.1	10.3	14.8
1956	45.7	22.0	23.8	11.1	12.7
1957	45.3	21.4	23.8	11.5	12.3
1958	40.3	19.0	21.4	11.3	10.1
1959	51.4	23.6	27.8	12.2	15.6
1960	49.5	22.7	26.8	12.9	13.9
1961	50.3	22.8	27.6	13.3	14.2
1962	58.3	24.0	34.3	14.4	19.9
1963	63.6	26.2	37.4	15.5	21.9
1964	70.7	28.0	42.7	17.3	25.3
1965	81.3	30.9	50.4	19.1	31.3
1966	86.6	33.7	52.9	19.4	33.5
1967	84.1	32.7	51.4	20.2	31.2
1968	90.7	39.4	51.4	22.0	29.4
1969	87.4	39.7	47.7	22.5	25.2
1970	74.7	34.4	40.3	22.5	17.9
1971	87.1	37.7	49.3	22.9	26.4
1972	100.7	41.9	58.8	24.4	34.4
1973	113.3	49.3	64.1	27.0	37.0
1974	101.7	51.8	49.9	29.7	20.2
1975	117.6	50.9	66.7	29.6	37.1
1976	145.2	64.2	81.0	34.6	46.4
1977	174.8	73.0	101.8	39.5	62.3
1978	197.2	83.5	113.7	44.7	69.0
1979	200.1	88.0	112.1	50.1	62.0
1980	177.2	84.8	92.4	54.7	37.7
1981	188.0	81.1	106.8	63.6	43.2
1982	150.0	63.1	86.9	66.9	20.0
1983	213.8	75.2	138.6	70.8	67.9
1984	273.3	93.6	179.7	78.1	101.6
1985 [p]	299.0	85.7	213.3	83.5	129.8
1982: I	149.9	64.2	85.7	66.4	19.3
II	149.6	64.0	85.6	66.0	19.6
III	154.3	64.3	90.0	66.6	23.3
IV	146.1	59.8	86.3	68.5	17.9
1983: I	173.4	58.9	114.5	69.3	45.1
II	205.9	73.8	132.1	69.6	62.5
III	228.4	84.1	144.3	71.1	73.2
IV	247.6	84.0	163.6	73.1	90.6
1984: I	268.0	99.1	168.9	75.3	93.6
II	277.8	100.6	177.1	77.5	99.6
III	271.2	87.4	183.8	78.9	104.9
IV	276.2	87.4	188.8	80.7	108.2
1985: I	281.7	83.4	198.3	82.0	116.3
II	288.1	82.3	205.8	83.1	122.6
III	309.1	87.4	221.7	83.9	137.8

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-85.—*Corporate profits by industry, 1929–85*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Corporate profits with inventory valuation adjustment and without capital consumption adjustment										
	Total	Domestic industries									Rest of the world
		Total	Financial[1]			Nonfinancial					
			Total	Federal Reserve banks	Other	Total	Manufacturing[2]	Transportation and public utilities	Wholesale and retail trade	Other	
1929	10.5	10.2	1.3	0.0	1.3	8.9	5.2	1.8	1.0	0.9	0.2
1933	−1.2	−1.2	.3	.0	.3	−1.5	−.4	.0	−.5	−.7	.0
1939	6.5	6.1	.8	.0	.8	5.3	3.3	1.0	.7	.3	.3
1940	9.8	9.6	1.0	.0	.9	8.6	5.5	1.3	1.2	.6	.3
1941	15.4	15.0	1.1	.0	1.0	14.0	9.5	2.0	1.4	1.1	.4
1942	20.5	20.1	1.2	.0	1.2	18.9	11.8	3.4	2.2	1.5	.4
1943	24.5	24.1	1.3	.0	1.3	22.8	13.8	4.4	3.0	1.6	.4
1944	24.0	23.5	1.6	.1	1.6	21.9	13.2	3.9	3.2	1.6	.4
1945	19.3	18.9	1.7	.1	1.6	17.3	9.7	2.7	3.3	1.5	.3
1946	19.6	18.9	2.1	.1	2.0	16.8	9.0	1.8	3.8	2.1	.7
1947	25.9	24.9	1.7	.1	1.6	23.2	13.6	2.2	4.6	2.9	1.0
1948	33.4	32.2	2.6	.2	2.3	29.6	17.6	3.0	5.5	3.6	1.3
1949	31.1	29.9	3.1	.2	2.9	26.8	16.2	3.0	4.5	3.1	1.1
1950	37.9	36.7	3.1	.2	3.0	33.5	20.9	4.0	5.0	3.6	1.3
1951	43.3	41.5	3.6	.3	3.3	37.9	24.6	4.6	5.0	3.7	1.7
1952	40.6	38.7	4.0	.4	3.7	34.7	21.7	4.9	4.8	3.3	1.9
1953	40.2	38.4	4.5	.4	4.1	33.9	22.0	5.0	3.8	3.1	1.8
1954	38.4	36.4	4.6	.3	4.3	31.8	19.9	4.7	3.8	3.4	2.0
1955	47.5	45.1	4.8	.3	4.5	40.3	26.0	5.6	5.0	3.6	2.4
1956	46.9	44.1	5.0	.5	4.5	39.1	24.7	5.9	4.5	4.1	2.8
1957	46.6	43.5	5.2	.6	4.6	38.3	24.0	5.8	4.4	4.0	3.1
1958	41.6	39.1	5.7	.6	5.1	33.5	19.4	5.9	4.6	3.6	2.5
1959	52.3	49.6	6.8	.7	6.0	42.9	26.4	7.0	5.9	3.6	2.7
1960	49.8	46.7	7.2	1.0	6.2	39.5	23.6	7.4	4.9	3.6	3.1
1961	50.1	46.8	7.0	.8	6.3	39.8	23.3	7.8	5.0	3.7	3.3
1962	55.2	51.5	7.3	.9	6.4	44.2	26.0	8.4	5.8	3.9	3.7
1963	59.8	55.8	6.8	1.0	5.8	49.0	29.3	9.3	5.9	4.4	4.0
1964	66.2	61.8	6.9	1.1	5.8	54.9	32.3	10.0	7.5	5.1	4.4
1965	76.2	71.5	7.5	1.4	6.2	64.0	39.3	11.0	8.1	5.6	4.6
1966	81.2	76.7	8.5	1.7	6.8	68.2	41.9	11.8	8.2	6.3	4.4
1967	78.6	73.9	9.0	2.0	7.0	64.9	38.6	10.7	9.1	6.5	4.7
1968	85.4	79.9	10.4	2.5	7.9	69.5	41.4	10.8	10.4	6.9	5.5
1969	81.4	74.8	11.2	3.1	8.1	63.7	36.7	10.3	10.5	6.1	6.5
1970	69.5	62.6	12.2	3.6	8.6	50.4	26.7	8.2	9.6	5.9	6.9
1971	82.7	75.1	14.1	3.3	10.7	61.0	34.3	8.5	11.7	6.5	7.6
1972	94.9	85.5	15.4	3.4	12.0	70.2	40.8	9.0	13.4	6.9	9.3
1973	107.1	92.6	15.8	4.5	11.2	76.8	46.2	8.5	13.9	8.2	14.5
1974	99.4	82.4	14.7	5.7	8.9	67.8	39.8	6.7	12.9	8.3	17.0
1975	123.9	109.5	11.2	5.7	5.5	98.3	53.6	10.3	22.2	12.2	14.4
1976	155.3	139.3	15.9	6.0	9.9	123.4	70.9	14.8	23.0	14.7	16.0
1977	183.8	165.5	21.6	6.2	15.4	143.9	80.6	17.9	27.5	17.8	18.3
1978	208.2	186.0	29.1	7.7	21.4	156.8	88.7	20.9	27.3	20.0	22.2
1979	214.1	180.4	27.8	9.6	18.2	152.6	87.5	15.2	28.7	21.1	33.7
1980	194.0	159.6	21.0	11.9	9.0	138.6	77.1	17.6	21.6	22.4	34.4
1981	202.3	173.8	16.5	14.5	1.9	157.3	88.5	19.5	32.5	16.8	28.5
1982	159.2	131.2	11.8	15.4	−3.6	119.4	58.0	19.3	34.6	7.5	28.0
1983	195.0	164.2	22.7	14.8	7.8	141.6	71.3	22.5	39.1	8.7	30.8
1984	232.3	200.1	19.2	16.7	2.5	180.9	88.5	28.6	50.7	13.0	32.2
1985[p]	227.2	195.8	23.5	16.8	6.7	172.3	77.6	29.7	49.9	15.0	31.4
1982: I	164.0	137.5	6.5	15.5	−9.0	131.1	61.5	21.4	37.9	10.3	26.4
II	160.7	132.5	9.7	15.9	−6.2	122.8	59.5	21.7	34.0	7.7	28.2
III	161.6	133.0	12.4	15.5	−3.1	120.6	64.3	17.6	32.9	5.8	28.5
IV	150.7	121.6	18.7	14.8	3.9	102.9	46.8	16.3	33.6	6.2	29.1
1983: I	163.7	136.2	22.0	14.5	7.5	114.2	52.3	21.1	32.6	8.2	27.5
II	190.5	161.1	25.0	14.5	10.5	136.1	64.6	22.9	40.8	7.8	29.4
III	207.3	174.4	22.4	14.9	7.5	152.0	78.9	23.7	39.9	9.5	32.9
IV	218.7	185.1	21.2	15.4	5.8	163.9	89.2	22.2	43.1	9.4	33.5
1984: I	234.4	201.0	20.8	16.0	4.8	180.2	94.2	27.8	46.8	11.5	33.4
II	241.8	212.3	20.4	16.4	4.0	191.9	94.9	29.6	52.7	14.7	29.5
III	226.5	193.3	17.2	17.0	.2	176.1	82.2	28.5	51.5	13.9	33.2
IV	226.3	193.7	18.4	17.4	1.0	175.3	82.7	28.6	51.8	12.1	32.7
1985: I	220.6	189.4	19.2	17.1	2.1	170.2	77.3	29.7	48.7	14.5	31.3
II	220.9	189.3	22.5	17.2	5.3	166.7	73.4	28.6	50.6	14.1	31.6
III	233.2	203.0	23.8	16.5	7.3	179.2	79.7	30.4	53.6	15.4	30.3

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[1] Consists of the following industries: Banking; credit agencies other than banks; security and commodity brokers, dealers, and services; insurance carriers; regulated investment companies; small business investment companies; and real estate investment trusts.

[2] See Table B-86 for industry detail.

Note.—The industry classification is on a company basis and is based on the 1972 Standard Industrial Classification (SIC) beginning 1948, and on the 1942 SIC prior to 1948.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-86.—*Corporate profits of manufacturing industries, 1929–85*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Corporate profits with inventory valuation adjustment and without capital consumption adjustment												
	Total manufacturing	Durable goods							Nondurable goods				
		Total	Primary metal industries	Fabricated metal products	Machinery, except electrical	Electric and electronic equipment	Motor vehicles and equipment	Other	Total	Food and kindred products	Chemicals and allied products	Petroleum and coal products	Other
1929	5.2	2.6							2.6				
1933	−.4	−.4							.0				
1939	3.3	1.7							1.7				
1940	5.5	3.1							2.4				
1941	9.5	6.4							3.1				
1942	11.8	7.2							4.6				
1943	13.8	8.1							5.7				
1944	13.2	7.4							5.9				
1945	9.7	4.5							5.2				
1946	9.0	2.4							6.6				
1947	13.6	5.8							7.8				
1948	17.6	7.5	1.6	0.8	1.2	0.7	1.4	1.8	10.0	1.9	1.7	2.8	3.7
1949	16.2	8.1	1.5	.7	1.3	.8	2.1	1.7	8.1	1.6	1.8	1.9	2.8
1950	20.9	12.0	2.3	1.1	1.6	1.2	3.1	2.6	8.9	1.6	2.3	2.3	2.7
1951	24.6	13.2	3.1	1.3	2.3	1.3	2.4	2.8	11.4	1.4	2.8	2.7	4.4
1952	21.7	11.7	1.9	1.0	2.3	1.5	2.4	2.6	9.9	1.7	2.3	2.3	3.6
1953	22.0	11.9	2.5	1.0	1.9	1.4	2.6	2.6	10.1	1.8	2.2	2.8	3.3
1954	19.9	10.5	1.7	.9	1.7	1.2	2.1	2.9	9.4	1.6	2.2	2.7	2.9
1955	26.0	14.3	2.9	1.1	1.7	1.1	4.1	3.5	11.8	2.2	3.0	3.0	3.6
1956	24.7	12.8	3.0	1.1	2.1	1.2	2.2	3.2	11.9	1.8	2.8	3.3	4.1
1957	24.0	13.3	3.0	1.1	2.0	1.5	2.6	3.1	10.7	1.8	2.8	2.6	3.6
1958	19.4	9.3	1.9	.9	1.4	1.3	0.9	2.9	10.0	2.1	2.5	2.1	3.3
1959	26.4	13.7	2.3	1.1	2.1	1.7	3.0	3.5	12.7	2.4	3.5	2.5	4.3
1960	23.6	11.6	2.0	.8	1.8	1.3	3.0	2.7	12.0	2.2	3.1	2.5	4.2
1961	23.3	11.4	1.6	1.0	1.9	1.3	2.5	3.1	11.9	2.3	3.2	2.2	4.1
1962	26.0	14.0	1.6	1.1	2.3	1.5	4.0	3.5	12.0	2.3	3.2	2.2	4.3
1963	29.3	16.3	2.0	1.3	2.5	1.6	4.9	4.0	13.1	2.7	3.6	2.1	4.6
1964	32.3	17.9	2.5	1.4	3.3	1.7	4.7	4.4	14.4	2.7	4.0	2.4	5.3
1965	39.3	23.0	3.1	2.0	3.9	2.7	6.2	5.1	16.3	2.8	4.6	2.9	6.0
1966	41.9	23.8	3.6	2.4	4.5	3.0	5.1	5.2	18.1	3.2	4.9	3.2	6.8
1967	38.6	21.0	2.7	2.4	4.1	2.9	3.9	4.9	17.6	3.2	4.3	3.9	6.3
1968	41.4	22.2	1.9	2.3	4.1	2.8	5.5	5.7	19.1	3.2	5.2	3.7	7.0
1969	36.7	19.0	1.4	2.0	3.7	2.3	4.8	4.9	17.7	3.0	4.6	3.3	6.9
1970	26.7	10.2	0.8	1.1	3.0	1.2	1.2	2.9	16.5	3.2	3.9	3.5	5.9
1971	34.3	16.4	.7	1.5	2.9	1.9	5.1	4.3	17.9	3.5	4.5	3.6	6.4
1972	40.8	22.5	1.6	2.1	4.3	2.8	5.9	5.8	18.3	2.9	5.2	3.0	7.2
1973	46.2	24.7	2.3	2.6	4.7	3.0	5.8	6.2	21.6	2.5	6.0	5.2	7.9
1974	39.8	14.6	4.9	1.6	3.1	.3	0.7	4.0	25.2	2.5	5.1	10.7	7.0
1975	53.6	19.8	2.7	3.1	4.8	2.4	2.0	4.8	33.8	8.8	6.4	9.5	9.1
1976	70.9	31.3	2.0	3.9	6.7	3.7	7.2	7.9	39.6	7.1	8.2	13.1	11.2
1977	80.6	38.6	1.3	4.4	8.9	5.8	9.4	8.8	42.0	6.9	7.8	12.9	14.4
1978	88.7	44.6	3.5	4.9	9.6	6.7	8.9	10.9	44.0	6.2	8.2	14.7	14.9
1979	87.5	37.3	3.6	5.2	9.1	5.2	4.7	9.5	50.2	5.8	7.2	22.5	14.7
1980	77.1	21.3	2.5	4.3	7.7	4.7	−2.5	4.5	55.8	6.1	5.4	31.4	12.9
1981	88.5	21.0	3.1	4.4	8.6	4.1	.1	0.7	67.5	8.7	8.2	36.5	14.1
1982	58.0	2.1	−4.9	2.4	4.1	1.7	−.8	−.4	55.9	7.0	5.2	29.1	14.5
1983	71.3	15.3	−2.7	3.0	3.1	1.0	6.7	4.1	56.0	6.8	6.8	21.8	20.5
1984	88.5	31.5	−.9	5.0	5.2	2.8	10.0	9.4	57.0	7.5	8.1	18.3	23.1
1985 p	77.6	26.7	−.4	4.5	4.8	3.2	7.4	7.2	51.0	6.6	5.8	16.2	22.5
1982: I	61.5	3.6	−3.7	3.4	8.1	1.7	−4.9	−1.0	57.9	6.7	6.7	33.5	11.1
II	59.5	5.9	−6.0	2.7	3.7	2.7	2.7	.2	53.6	6.9	6.2	26.7	13.8
III	64.3	5.5	−4.9	2.4	3.1	2.6	1.7	.6	58.7	7.5	4.7	30.5	16.0
IV	46.8	−6.6	−5.1	.9	1.3	.1	−2.7	−1.2	53.5	7.1	3.2	25.9	17.3
1983: I	52.3	5.5	−2.7	1.8	1.6	.8	1.9	2.1	46.8	6.7	5.0	16.1	18.9
II	64.6	11.3	−3.0	2.4	3.3	.5	4.4	3.7	53.3	7.0	5.9	20.5	19.9
III	78.9	17.7	−2.9	3.0	3.3	.3	9.5	4.5	61.2	6.2	8.2	25.5	21.3
IV	89.2	26.7	−2.3	4.8	4.4	2.5	11.1	6.2	62.5	7.4	8.2	25.2	21.7
1984: I	94.2	32.9	−1.2	4.4	4.5	2.8	14.4	8.0	61.3	8.1	9.0	20.1	24.1
II	94.9	31.4	−.7	4.7	6.0	2.0	9.8	9.5	63.5	7.8	9.1	22.7	23.8
III	82.2	28.8	−1.1	4.8	4.8	3.2	7.4	9.9	53.4	7.3	7.4	15.7	23.0
IV	82.7	32.9	−.7	5.9	5.7	3.1	8.5	10.3	49.8	6.6	6.8	14.8	21.5
1985: I	77.3	27.8	−.7	4.6	3.3	2.7	9.5	8.4	49.5	6.6	5.8	14.1	23.0
II	73.4	26.6	−.9	4.3	4.8	2.9	7.8	7.7	46.9	7.0	5.7	11.8	22.4
III	79.7	25.2	−.2	4.6	5.3	3.7	5.2	6.5	54.5	7.7	5.6	19.7	21.5

Note.—The industry classification is on a company basis and is based on the 1972 Standard Industrial Classification (SIC) beginning 1948, and on the 1942 SIC prior to 1948.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–87.—*Sales, profits, and stockholders' equity, all manufacturing corporations, 1950–85*

[Billions of dollars]

Year or quarter	All manufacturing corporations				Durable goods industries				Nondurable goods industries			
	Sales (net)	Profits		Stock-holders' equity [2]	Sales (net)	Profits		Stock-holders' equity [2]	Sales (net)	Profits		Stock-holders' equity [2]
		Before income taxes [1]	After income taxes			Before income taxes [1]	After income taxes			Before income taxes [1]	After income taxes	
1950	181.9	23.2	12.9	83.3	86.8	12.9	6.7	39.9	95.1	10.3	6.1	43.5
1951	245.0	27.4	11.9	98.3	116.8	15.4	6.1	47.2	128.1	12.1	5.7	51.1
1952	250.2	22.9	10.7	103.7	122.0	12.9	5.5	49.8	128.0	10.0	5.2	53.9
1953	265.9	24.4	11.3	108.2	137.9	14.0	5.8	52.4	128.0	10.4	5.5	55.7
1954	248.5	20.9	11.2	113.1	122.8	11.4	5.6	54.9	125.7	9.6	5.6	58.2
1955	278.4	28.6	15.1	120.1	142.1	16.5	8.1	58.8	136.3	12.1	7.0	61.3
1956	307.3	29.8	16.2	131.6	159.5	16.5	8.3	65.2	147.8	13.2	7.8	66.4
1957	320.0	28.2	15.4	141.1	166.0	15.8	7.9	70.5	154.1	12.4	7.5	70.6
1958	305.3	22.7	12.7	147.4	148.6	11.4	5.8	72.8	156.7	11.3	6.9	74.6
1959	338.0	29.7	16.3	157.1	169.4	15.8	8.1	77.9	168.5	13.9	8.3	79.2
1960	345.7	27.5	15.2	165.4	173.9	14.0	7.0	82.3	171.8	13.5	8.2	83.1
1961	356.4	27.5	15.3	172.6	175.2	13.6	6.9	84.9	181.2	13.9	8.5	87.7
1962	389.4	31.9	17.7	181.4	195.3	16.8	8.6	89.1	194.1	15.1	9.2	92.3
1963	412.7	34.9	19.5	189.7	209.0	18.5	9.5	93.3	203.6	16.4	10.0	96.3
1964	443.1	39.6	23.2	199.8	226.3	21.2	11.6	98.5	216.8	18.3	11.6	101.3
1965	492.2	46.5	27.5	211.7	257.0	26.2	14.5	105.4	235.2	20.3	13.0	106.3
1966	554.2	51.8	30.9	230.3	291.7	29.2	16.4	115.2	262.4	22.6	14.6	115.1
1967	575.4	47.8	29.0	247.6	300.6	25.7	14.6	125.0	274.8	22.0	14.4	122.6
1968	631.9	55.4	32.1	265.9	335.5	30.6	16.5	135.6	296.4	24.8	15.5	130.3
1969	694.6	58.1	33.2	289.9	366.5	31.5	16.9	147.6	328.1	26.6	16.4	142.3
1970	708.8	48.1	28.6	306.8	363.1	23.0	12.9	155.1	345.7	25.2	15.7	151.7
1971	751.1	52.9	31.0	320.8	381.8	26.5	14.5	160.4	369.3	26.5	16.5	160.5
1972	849.5	63.2	36.5	343.4	435.8	33.6	18.4	171.4	413.7	29.6	18.0	172.0
1973	1,017.2	81.4	48.1	374.1	527.3	43.6	24.8	188.7	489.9	37.8	23.3	185.4
1973: IV	275.1	21.4	13.0	386.4	140.1	10.8	6.3	194.7	135.0	10.6	6.7	191.7
New series:												
1973: IV	236.6	20.6	13.2	368.0	122.7	10.1	6.2	185.8	113.9	10.5	7.0	182.1
1974	1,060.6	92.1	58.7	395.0	529.0	41.1	24.7	196.0	531.6	51.0	34.1	199.0
1975	1,065.2	79.9	49.1	423.4	521.1	35.3	21.4	208.1	544.1	44.6	27.7	215.3
1976	1,203.2	104.9	64.5	462.7	589.6	50.7	30.8	224.3	613.7	54.3	33.7	238.4
1977	1,328.1	115.1	70.4	496.7	657.3	57.9	34.8	239.9	670.8	57.2	35.5	256.8
1978	1,496.4	132.5	81.1	540.5	760.7	69.6	41.8	262.6	735.7	62.9	39.3	277.9
1979	1,741.8	154.2	98.7	600.5	865.7	72.4	45.2	292.5	876.1	81.8	53.5	308.0
1980	1,912.8	145.8	92.6	668.1	889.1	57.4	35.6	317.7	1,023.7	88.4	56.9	350.4
1981	2,144.7	158.6	101.3	743.4	979.5	67.2	41.6	350.4	1,165.2	91.3	59.6	393.0
1982	2,039.4	108.2	70.9	770.2	913.1	34.7	21.7	355.5	1,126.4	73.6	49.3	414.7
1983	2,114.3	133.1	85.8	812.8	973.5	48.7	30.0	372.4	1,140.8	84.4	55.8	440.4
1984	2,335.0	165.6	107.6	864.2	1,107.6	75.5	48.9	395.6	1,227.5	90.0	58.8	468.5
1983: I	490.8	24.1	15.5	787.7	220.6	7.6	4.6	359.6	270.3	16.5	11.0	428.1
II	527.1	34.6	22.1	804.1	243.6	13.2	8.3	368.1	283.5	21.3	13.8	436.0
III	534.7	36.2	23.2	821.9	243.9	12.7	8.0	376.7	290.8	23.5	15.2	445.2
IV	561.6	38.2	25.0	837.6	265.4	15.2	9.2	385.1	296.2	23.0	15.8	452.5
1984: I	566.1	42.5	26.7	850.9	264.6	18.9	11.7	386.5	301.5	23.6	15.0	464.5
II	597.9	48.5	31.0	857.0	284.8	22.9	14.6	392.1	313.1	25.6	16.4	464.9
III	577.1	38.5	25.7	865.1	270.7	16.6	11.2	397.2	306.4	21.9	14.5	467.9
IV	594.0	36.1	24.3	883.6	287.5	17.2	11.4	406.7	306.5	19.0	13.0	476.9
1985: I	567.6	35.6	22.6	866.7	273.4	15.4	9.3	407.6	294.2	20.2	13.2	459.1
II	596.2	37.4	23.7	869.3	290.8	18.5	11.3	413.6	305.5	18.9	12.4	455.7
III	580.4	33.7	21.6	873.8	278.6	12.9	8.2	416.9	301.8	20.8	13.4	456.9

[1] In the old series, "income taxes" refers to Federal income taxes only, as State and local income taxes had already been deducted. In the new series, no income taxes have been deducted.

[2] Annual data are average equity for the year (using four end-of-quarter figures).

Note.—Data are not necessarily comparable from one period to another due to changes in accounting procedures, industry classifications, sampling procedures, etc. For explanatory notes concerning compilation of the series, see "Quarterly Financial Report for Manufacturing, Mining, and Trade Corporations," Department of Commerce, Bureau of the Census.

Source: Department of Commerce, Bureau of the Census.

Table B-88.—*Relation of profits after taxes to stockholders' equity and to sales, all manufacturing corporations, 1947–85*

Year or quarter	Ratio of profits after income taxes (annual rate) to stockholders' equity—percent [1]			Profits after income taxes per dollar of sales—cents		
	All manufacturing corporations	Durable goods industries	Nondurable goods industries	All manufacturing corporations	Durable goods industries	Nondurable goods industries
1947	15.6	14.4	16.6	6.7	6.7	6.7
1948	16.0	15.7	16.2	7.0	7.1	6.8
1949	11.6	12.1	11.2	5.8	6.4	5.4
1950	15.4	16.9	14.1	7.1	7.7	6.5
1951	12.1	13.0	11.2	4.9	5.3	4.5
1952	10.3	11.1	9.7	4.3	4.5	4.1
1953	10.5	11.1	9.9	4.3	4.2	4.3
1954	9.9	10.3	9.6	4.5	4.6	4.4
1955	12.6	13.8	11.4	5.4	5.7	5.1
1956	12.3	12.8	11.8	5.3	5.2	5.3
1957	10.9	11.3	10.6	4.8	4.8	4.9
1958	8.6	8.0	9.2	4.2	3.9	4.4
1959	10.4	10.4	10.4	4.8	4.8	4.9
1960	9.2	8.5	9.8	4.4	4.0	4.8
1961	8.9	8.1	9.6	4.3	3.9	4.7
1962	9.8	9.6	9.9	4.5	4.4	4.7
1963	10.3	10.1	10.4	4.7	4.5	4.9
1964	11.6	11.7	11.5	5.2	5.1	5.4
1965	13.0	13.8	12.2	5.6	5.7	5.5
1966	13.4	14.2	12.7	5.6	5.6	5.6
1967	11.7	11.7	11.8	5.0	4.8	5.3
1968	12.1	12.2	11.9	5.1	4.9	5.2
1969	11.5	11.4	11.5	4.8	4.6	5.0
1970	9.3	8.3	10.3	4.0	3.5	4.5
1971	9.7	9.0	10.3	4.1	3.8	4.5
1972	10.6	10.8	10.5	4.3	4.2	4.4
1973	12.8	13.1	12.6	4.7	4.7	4.8
1973: IV	13.4	12.9	14.0	4.7	4.5	5.0
New series:						
1973: IV	14.3	13.3	15.3	5.6	5.0	6.1
1974	14.9	12.6	17.1	5.5	4.7	6.4
1975	11.6	10.3	12.9	4.6	4.1	5.1
1976	13.9	13.7	14.2	5.4	5.2	5.5
1977	14.2	14.5	13.8	5.3	5.3	5.3
1978	15.0	16.0	14.2	5.4	5.5	5.3
1979	16.4	15.4	17.4	5.7	5.2	6.1
1980	13.9	11.2	16.3	4.8	4.0	5.6
1981	13.6	11.9	15.2	4.7	4.2	5.1
1982	9.2	6.1	11.9	3.5	2.4	4.4
1983	10.6	8.1	12.7	4.1	3.1	4.9
1984	12.5	12.4	12.5	4.6	4.4	4.8
1983: I	7.9	5.1	10.2	3.2	2.1	4.1
II	11.0	9.0	12.7	4.2	3.4	4.9
III	11.3	8.5	13.7	4.3	3.3	5.2
IV	11.9	9.5	14.0	4.5	3.5	5.3
1984: I	12.5	12.1	12.9	4.7	4.4	5.0
II	14.5	14.9	14.1	5.2	5.1	5.2
III	11.9	11.3	12.4	4.4	4.1	4.7
IV	11.0	11.2	10.9	4.1	4.0	4.2
1985: I	10.4	9.2	11.5	4.0	3.4	4.5
II	10.9	10.9	10.9	4.0	3.9	4.1
III	9.9	7.8	11.7	3.7	2.9	4.4

[1] Annual ratios based on average equity for the year (using four end-of-quarter figures). Quarterly ratios based on equity at end of quarter only.

Note.—Based on data in millions of dollars.
See Note, Table B-87.

Source: Department of Commerce, Bureau of the Census.

TABLE B-89.—*Sources and uses of funds, nonfarm nonfinancial corporate business, 1946–85*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Sources											Uses			Discrepancy (sources less uses)
	Total	Internal					External					Total	Capital expenditures[3]	Increase in financial assets	
		Total	Domestic undistributed profits	Inventory valuation and capital consumption adjustments	Capital consumption allowances	Foreign earnings[1]	Total	Credit market funds			Other[2]				
								Total	Securities and mortgages	Loans and short-term paper					
1946	18.7	8.1	8.1	−8.2	7.6	0.7	10.6	6.9	3.6	3.3	3.7	16.8	18.1	−1.4	1.9
1947	27.0	12.9	12.1	−9.4	9.2	1.0	14.1	8.4	5.4	3.0	5.8	25.6	17.3	8.4	1.4
1948	28.9	19.1	13.2	−6.1	10.8	1.3	9.7	6.5	6.7	−.2	3.3	25.3	20.3	5.0	3.6
1949	19.9	19.5	8.7	−2.0	11.7	1.1	.4	3.1	4.9	−1.8	−2.7	18.3	14.8	3.5	1.6
1950	42.1	18.0	13.1	−8.9	12.6	1.3	24.0	8.1	4.2	3.9	15.9	40.4	24.0	16.4	1.7
1951	36.4	20.2	9.6	−5.7	14.6	1.7	16.2	10.5	6.4	4.1	5.7	37.6	30.2	7.4	−1.2
1952	29.9	21.9	7.8	−3.5	15.7	1.9	8.0	9.5	8.0	1.4	−1.5	29.2	24.6	4.6	.6
1953	27.8	21.7	8.0	−4.8	16.7	1.8	6.1	5.7	6.0	−.4	.5	28.0	25.7	2.3	−.1
1954	29.6	23.9	7.6	−3.5	17.8	2.0	5.7	6.5	6.7	−.2	−.8	27.8	22.9	4.9	1.8
1955	52.7	29.5	11.8	−3.7	19.0	2.4	23.2	10.2	6.4	3.7	13.1	49.1	32.6	16.5	3.5
1956	44.9	29.5	10.9	−5.9	21.7	2.8	15.4	12.8	7.5	5.3	2.5	40.8	36.8	4.0	4.1
1957	43.4	31.5	9.6	−4.9	23.7	3.1	11.9	12.3	10.4	1.9	−.4	39.1	34.9	4.2	4.3
1958	41.9	30.3	6.5	−3.4	24.7	2.5	11.7	10.5	10.5	−.0	1.2	38.5	27.7	10.8	3.4
1959	56.3	36.0	10.7	−3.0	25.7	2.7	20.2	12.3	8.1	4.2	7.9	51.2	37.0	14.2	5.0
1960	48.6	35.4	8.0	−2.3	26.6	3.0	13.2	12.1	7.5	4.6	1.2	41.4	37.5	3.9	7.2
1961	56.3	36.5	7.2	−1.2	27.4	3.2	19.8	12.9	10.7	2.2	6.9	51.0	36.7	14.2	5.3
1962	60.1	42.8	9.6	1.4	28.2	3.6	17.3	12.8	9.4	3.4	4.6	55.5	43.2	12.3	4.6
1963	68.4	46.5	11.1	2.3	29.2	3.9	22.0	12.5	8.4	4.0	9.5	60.4	44.7	15.7	8.0
1964	73.9	51.8	14.6	2.4	30.6	4.2	22.1	14.1	7.8	6.2	8.0	64.9	50.1	14.8	9.0
1965	91.8	58.5	19.1	2.5	32.5	4.5	33.3	18.5	7.6	11.0	14.8	82.7	61.0	21.8	9.1
1966	97.6	62.6	21.2	1.8	35.4	4.2	35.0	23.8	14.3	9.5	11.2	91.3	74.7	16.6	6.4
1967	94.7	63.6	18.1	2.5	38.6	4.4	31.1	27.8	19.1	8.7	3.3	88.5	72.2	16.3	6.2
1968	113.5	65.0	17.1	.4	42.3	5.2	48.5	27.7	15.0	12.6	20.9	106.0	75.4	30.6	7.5
1969	115.5	64.4	13.4	−1.8	46.7	6.1	51.1	32.3	14.6	17.7	18.8	115.3	83.7	31.6	.2
1970	102.3	61.8	7.6	−4.1	51.8	6.5	40.5	35.3	26.3	9.0	5.3	98.7	80.0	18.7	3.6
1971	125.3	73.5	12.7	−3.2	56.8	7.1	51.8	37.2	32.8	4.4	14.6	122.7	86.0	36.7	2.6
1972	151.6	85.0	18.1	−3.8	62.0	8.6	66.6	43.4	26.4	16.9	23.2	149.1	99.0	50.1	2.4
1973	192.5	91.7	28.1	−17.3	67.2	13.7	100.7	56.7	20.7	36.0	44.0	191.9	121.5	70.5	.5
1974	190.3	85.6	32.4	−41.7	78.7	16.3	104.7	70.2	26.3	43.9	34.5	190.1	137.9	52.2	.2
1975	157.0	119.7	34.0	−21.1	93.8	13.0	37.3	30.8	38.7	−7.9	6.5	150.9	109.7	41.2	6.0
1976	211.0	134.2	43.9	−27.5	103.6	14.3	76.8	54.7	38.2	16.5	22.1	201.8	148.3	53.5	9.2
1977	254.1	157.4	54.7	−26.8	114.3	15.1	96.7	72.4	35.8	36.6	24.3	237.6	175.1	62.5	16.5
1978	317.5	175.7	62.8	−36.1	129.2	19.7	141.8	80.5	32.8	47.7	61.3	293.7	201.7	92.0	23.8
1979	345.2	188.8	67.3	−56.8	147.7	30.6	156.4	88.2	20.9	67.3	68.2	343.7	219.5	124.3	1.4
1980	337.6	189.5	49.0	−57.2	167.8	29.9	148.1	93.3	52.4	40.9	54.8	317.7	221.2	96.5	20.0
1981	371.6	230.4	46.0	−29.6	189.5	24.4	141.3	92.0	21.8	70.2	49.3	334.6	271.2	63.4	37.0
1982	312.8	234.3	10.4	−5.5	207.1	22.4	78.5	83.3	43.9	39.4	−4.9	253.8	229.6	24.2	58.9
1983	416.9	280.5	18.6	21.8	215.2	24.8	136.4	82.9	56.7	26.2	53.5	369.6	256.3	113.3	47.3
1984	487.4	334.8	34.3	49.0	228.5	23.0	152.6	104.7	−15.9	120.6	47.9	444.0	367.8	76.2	43.4
1983:															
I	326.2	250.4	−1.3	17.9	211.4	22.4	75.9	79.5	73.2	6.3	−3.6	284.7	207.0	77.7	41.5
II	419.6	269.7	15.1	18.4	212.5	23.7	149.9	73.0	76.5	−3.5	76.9	379.4	255.5	123.9	40.2
III	423.7	292.5	30.6	17.2	217.3	27.5	131.2	67.6	42.9	24.7	63.6	379.8	270.8	109.0	43.9
IV	498.0	309.3	30.2	33.9	219.7	25.6	188.7	111.5	34.2	77.2	77.2	434.4	292.0	142.4	63.6
1984:															
I	511.1	319.6	37.6	33.4	222.8	25.7	191.5	106.2	−33.2	139.4	85.3	480.6	355.6	125.0	30.4
II	490.6	331.7	39.8	44.1	226.5	21.3	159.0	78.0	−66.6	144.6	80.9	449.9	364.1	85.9	40.7
III	442.8	340.7	29.3	56.9	230.1	24.3	102.1	76.2	−5.6	81.8	25.9	395.7	387.9	7.8	47.1
IV	505.1	347.1	30.6	61.5	234.3	20.7	158.0	158.6	42.0	116.5	−.6	449.9	363.8	86.1	55.3
1985:															
I	419.9	351.5	24.0	68.5	238.3	20.7	68.4	59.7	−16.5	76.2	8.7	399.7	371.5	28.2	20.1
II	428.7	357.9	17.3	75.6	242.1	22.8	70.8	55.0	22.5	32.5	15.8	392.3	363.5	28.8	36.4
III	412.3	379.5	22.0	86.5	246.7	24.3	32.8	23.5	4.6	18.9	9.3	368.8	359.0	9.8	43.5

[1] Foreign branch profits, dividends, and subsidiaries' earnings retained abroad.

[2] Consists of tax liabilities, trade debt, and direct foreign investment in the United States.

[3] Plant and equipment, residential structures, inventory investment, and mineral rights from U.S. Government.

Source: Board of Governors of the Federal Reserve System.

TABLE B-90.—*State and municipal and business securities offered, 1934–85*

[Millions of dollars]

Year or quarter	State and municipal securities offered for cash (principal amounts)	Business securities offered for cash [1]								
		Total offerings	Type of security			Industry of issuer				
			Common stock [2]	Preferred stock	Bonds and notes	Manufacturing [3]	Electric, gas, and water [4]	Transportation [5]	Communication	Other
1934	939	397	19	6	372	67	133	176	…	21
1939	1,128	2,164	87	98	1,979	604	1,271	186	…	103
1940	1,238	2,677	108	183	2,386	992	1,203	324	…	159
1941	956	2,667	110	167	2,389	848	1,357	366	…	96
1942	524	1,062	34	112	917	539	472	48	…	4
1943	435	1,170	56	124	990	510	477	161	…	21
1944	661	3,202	163	369	2,670	1,061	1,422	609	…	109
1945	795	6,011	397	758	4,855	2,026	2,319	1,454	…	211
1946	1,157	6,900	891	1,127	4,882	3,701	2,158	711	…	329
1947	2,324	6,577	779	762	5,036	2,742	3,257	286	…	293
1948	2,690	7,078	614	492	5,973	2,226	2,187	755	902	1,008
1949	2,907	6,052	736	425	4,890	1,414	2,320	800	571	946
1950	3,532	6,362	811	631	4,920	1,200	2,649	813	399	1,300
1951	3,189	7,741	1,212	838	5,691	3,122	2,455	494	612	1,058
1952	4,401	9,534	1,369	564	7,601	4,039	2,675	992	760	1,068
1953	5,558	8,898	1,326	489	7,083	2,254	3,029	595	882	2,138
1954	6,969	9,516	1,213	816	7,488	2,268	3,713	778	720	2,037
1955	5,977	10,240	2,185	635	7,420	2,994	2,464	893	1,132	2,757
1956	5,446	10,939	2,301	636	8,002	3,647	2,529	724	1,419	2,619
1957	6,958	12,884	2,516	411	9,957	4,234	3,938	824	1,462	2,426
1958	7,449	11,558	1,334	571	9,653	3,515	3,804	824	1,424	1,991
1959	7,681	9,748	2,027	531	7,190	2,073	3,258	967	717	2,733
1960	7,230	10,154	1,664	409	8,081	2,152	2,851	718	1,050	3,383
1961	8,360	13,165	3,294	450	9,420	4,077	3,032	694	1,834	3,527
1962	8,558	10,705	1,314	422	8,969	3,249	2,825	567	1,303	2,761
1963	10,107	12,211	1,011	343	10,856	3,514	2,677	957	1,105	3,957
1964	10,544	13,957	2,679	412	10,865	3,046	2,760	982	2,189	4,980
1965	11,148	14,782	1,473	724	12,585	5,414	2,934	702	945	4,787
1966	11,089	17,385	1,901	580	14,904	7,056	3,666	1,494	2,003	3,167
1967	14,288	24,014	1,927	881	21,206	11,069	4,935	1,639	1,975	4,396
1968	16,374	21,261	3,885	636	16,740	6,958	5,293	1,564	1,775	5,671
1969	11,460	25,997	7,640	691	17,666	6,346	6,715	1,779	2,172	8,985
1970	17,762	37,451	7,037	1,390	29,023	10,647	11,009	1,253	5,291	9,252
1971	24,370	43,229	9,485	3,683	30,061	11,651	11,721	1,148	5,840	12,867
1972	22,941	39,705	10,707	3,371	25,628	6,398	11,314	860	4,836	16,298
1973	22,953	31,680	7,642	3,341	20,700	4,832	10,269	811	4,872	10,897
1974	22,824	37,820	4,050	2,273	31,497	10,511	12,836	1,005	3,932	9,632
1975	29,326	53,632	7,414	3,459	42,759	18,652	15,893	3,637	4,466	10,983
1976	33,845	53,314	8,305	2,803	42,206	15,496	14,418	4,649	3,562	15,194
1977	45,060	54,229	8,047	3,916	42,266	13,757	13,704	3,218	4,443	19,113
1978 [6]	46,215	29,949	7,724	1,757	20,468	4,483	9,138	1,251	2,959	12,120
1979	42,261	37,248	8,816	1,964	26,468	6,643	9,937	1,640	4,482	14,547
1980	47,133	67,126	19,282	3,194	44,650	20,857	13,746	2,306	6,865	23,356
1981	46,134	65,434	25,491	1,697	38,246	14,696	13,075	2,386	5,871	29,406
1982	77,179	73,970	23,619	4,953	45,398	13,851	16,529	2,169	3,899	37,522
1983	83,348	103,088	45,228	7,693	50,167	22,958	12,749	4,164	5,527	57,690
1984	101,882	85,948	22,151	4,219	59,578	14,467	7,523	1,733	2,018	60,207
1985: First three quarters	92,022	85,892	27,796	4,621	53,475	17,725	6,602	3,118	2,061	56,386
1984: I	14,593	24,924	6,321	1,122	17,481	1,798	1,491	432	477	20,726
II	18,663	15,675	5,141	1,118	9,416	2,789	1,382	429	124	10,951
III	25,331	22,117	5,300	678	16,139	4,529	2,110	538	229	14,711
IV	43,294	23,232	5,389	1,301	16,542	5,351	2,540	334	1,188	13,819
1985: I	21,737	20,958	8,349	849	11,760	3,876	1,478	520	799	14,285
II	34,194	30,300	9,187	1,734	19,379	5,659	2,768	1,731	575	19,567
III	36,091	34,634	10,260	2,038	22,336	8,190	2,356	867	687	22,534

[1] Business securities offered include securities offered by corporate and non-corporate business enterprises such as limited partnerships. Beginning 1978 excludes private placements.

[2] Common stock combines the conventional ownership shares of corporate business and securities issued by non-corporate business, *e.g.*, limited partnership interests, voting trust certificates and condominium securities.

[3] Prior to 1948, also includes extractive, radio broadcasting, airline companies, commercial, and miscellaneous company issues.

[4] Prior to 1948, also includes telephone, street railway, and bus company issues.

[5] Prior to 1948, includes railroad issues only.

[6] Beginning 1978, business security offerings exclude private placements.

Note.—Covers substantially all new issues of State, municipal, and business securities offered for cash sale in the United States in amounts over $100,000 and with terms to maturity of more than 1 year; excludes notes issued exclusively to commercial banks, intercorporate transactions, and issues to be sold over an extended period, such as employee-purchase plans. Closed-end investment company issues are included beginning 1973.

Sources: Securities and Exchange Commission, "The Commercial and Financial Chronicle," and "The Bond Buyer."

TABLE B–91.—*Common stock prices and yields, 1949–85*

Year or month	Common stock prices [1]							Common stock yields (percent) [5]	
	New York Stock Exchange indexes (Dec. 31, 1965=50) [2]					Dow Jones industrial average [3]	Standard & Poor's composite index (1941–43=10) [4]	Dividend-price ratio [6]	Earnings-price ratio [7]
	Composite	Industrial	Transportation	Utility	Finance				
1949	9.02	......	......	......	......	179.48	15.23	6.59	15.48
1950	10.87	......	......	......	......	216.31	18.40	6.57	13.99
1951	13.08	......	......	......	......	257.64	22.34	6.13	11.82
1952	13.81	......	......	......	......	270.76	24.50	5.80	9.47
1953	13.67	......	......	......	......	275.97	24.73	5.80	10.26
1954	16.19	......	......	......	......	333.94	29.69	4.95	8.57
1955	21.54	......	......	......	......	442.72	40.49	4.08	7.95
1956	24.40	......	......	......	......	493.01	46.62	4.09	7.55
1957	23.67	......	......	......	......	475.71	44.38	4.35	7.89
1958	24.56	......	......	......	......	491.66	46.24	3.97	6.23
1959	30.73	......	......	......	......	632.12	57.38	3.23	5.78
1960	30.01	......	......	......	......	618.04	55.85	3.47	5.90
1961	35.37	......	......	......	......	691.55	66.27	2.98	4.62
1962	33.49	......	......	......	......	639.76	62.38	3.37	5.82
1963	37.51	......	......	......	......	714.81	69.87	3.17	5.50
1964	43.76	......	......	......	......	834.05	81.37	3.01	5.32
1965	47.39	......	......	......	......	910.88	88.17	3.00	5.59
1966	46.15	46.18	50.26	45.41	44.45	873.60	85.26	3.40	6.63
1967	50.77	51.97	53.51	45.43	49.82	879.12	91.93	3.20	5.73
1968	55.37	58.00	50.58	44.19	65.85	906.00	98.70	3.07	5.67
1969	54.67	57.44	46.96	42.80	70.49	876.72	97.84	3.24	6.08
1970	45.72	48.03	32.14	37.24	60.00	753.19	83.22	3.83	6.45
1971	54.22	57.92	44.35	39.53	70.38	884.76	98.29	3.14	5.41
1972	60.29	65.73	50.17	38.48	78.35	950.71	109.20	2.84	5.50
1973	57.42	63.08	37.74	37.69	70.12	923.88	107.43	3.06	7.12
1974	43.84	48.08	31.89	29.79	49.67	759.37	82.85	4.47	11.59
1975	45.73	50.52	31.10	31.50	47.14	802.49	86.16	4.31	9.15
1976	54.46	60.44	39.57	36.97	52.94	974.92	102.01	3.77	8.90
1977	53.69	57.86	41.09	40.92	55.25	894.63	98.20	4.62	10.79
1978	53.70	58.23	43.50	39.22	56.65	820.23	96.02	5.28	12.03
1979	58.32	64.76	47.34	38.20	61.42	844.40	103.01	5.47	13.46
1980	68.10	78.70	60.61	37.35	64.25	891.41	118.78	5.26	12.66
1981	74.02	85.44	72.61	38.91	73.52	932.92	128.05	5.20	11.96
1982	68.93	78.18	60.41	39.75	71.99	884.36	119.71	5.81	11.60
1983	92.63	107.45	89.36	47.00	95.34	1,190.34	160.41	4.40	8.03
1984	92.46	108.01	85.63	46.44	89.28	1,178.48	160.46	4.64	10.02
1985	108.09	123.79	104.11	56.75	114.21	1,328.23	186.84	4.25	......
1984: Jan	96.16	112.16	97.98	47.43	95.79	1,258.89	166.39	4.27	......
Feb	90.60	105.44	86.33	45.67	89.95	1,164.46	157.25	4.59	......
Mar	90.66	105.92	86.10	44.83	89.50	1,161.97	157.44	4.63	9.59
Apr	90.67	106.56	83.61	43.86	88.22	1,152.71	157.60	4.64	......
May	90.07	105.94	81.62	44.22	85.06	1,143.42	156.55	4.72	......
June	88.28	104.04	79.29	43.65	80.75	1,121.14	153.12	4.86	10.58
July	87.08	102.29	76.72	44.17	79.03	1,113.27	151.08	4.93	......
Aug	94.49	111.20	86.86	46.49	87.92	1,212.82	164.42	4.62	......
Sept	95.68	112.18	86.88	47.47	91.59	1,213.51	166.11	4.54	9.97
Oct	95.09	110.44	86.82	49.02	92.94	1,199.30	164.82	4.62	......
Nov	95.85	110.91	87.37	49.93	95.28	1,211.30	166.27	4.61	......
Dec	94.85	109.05	88.00	50.58	95.29	1,188.96	164.48	4.68	9.95
1985: Jan	99.11	113.99	94.88	51.95	101.34	1,238.16	171.61	4.51	......
Feb	104.73	120.71	101.76	53.44	109.58	1,283.23	180.88	4.30	......
Mar	103.92	119.64	98.30	53.91	107.59	1,268.83	179.42	4.37	9.07
Apr	104.66	119.93	96.47	55.51	109.39	1,266.36	180.62	4.37	......
May	107.00	121.88	99.66	57.32	115.31	1,279.40	184.90	4.31	......
June	109.52	124.11	105.79	59.61	118.47	1,314.00	188.89	4.21	8.12
July	111.64	126.94	111.67	59.68	119.85	1,343.17	192.54	4.14	......
Aug	109.09	124.92	109.92	56.99	114.68	1,326.18	188.31	4.23	......
Sept	106.62	122.35	104.96	55.93	110.21	1,317.95	184.06	4.32	8.03
Oct	107.57	123.65	103.72	55.84	112.36	1,351.58	186.18	4.28	......
Nov	113.93	130.53	108.61	59.07	122.83	1,432.88	197.45	4.06	......
Dec	119.33	136.77	113.52	61.69	128.86	1,517.02	207.26	3.88	......

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[1] Averages of daily closing prices, except New York Stock Exchange data through May 1964 are averages of weekly closing prices.

[2] Includes all the stocks (more than 1,500) listed on the New York Stock Exchange.

[3] Includes 30 stocks.

[4] Includes 500 stocks.

[5] Standard & Poor's series, based on 500 stocks in the composite index.

[6] Aggregate cash dividends (based on latest known annual rate) divided by aggregate market value based on Wednesday closing prices. Monthly data are averages of weekly figures; annual data are averages of monthly figures.

[7] Quarterly data are ratio of earnings (after taxes) for 4 quarters ending with particular quarter to price index for last day of that quarter. Annual ratios are averages of quarterly ratios.

Note.—All data relate to stocks listed on the New York Stock Exchange.

Sources: New York Stock Exchange, Dow Jones & Co., Inc., and Standard & Poor's Corporation.

TABLE B–92.—*Business formation and business failures, 1940–85*

Year or month	Index of net business formation (1967 = 100)	New business incorporations (number)	Business failures[1]						
			Business failure rate[2]	Number of failures			Amount of current liabilities (millions of dollars)		
				Total	Liability size class		Total	Liability size class	
					Under $100,000	$100,000 and over		Under $100,000	$100,000 and over
1940	...	...	63.0	13,619	13,400	219	166.7	119.9	46.8
1941	...	...	54.4	11,848	11,685	163	136.1	100.7	35.4
1942	...	...	44.6	9,405	9,282	123	100.8	80.3	20.5
1943	...	...	16.4	3,221	3,155	66	45.3	30.2	15.1
1944	...	...	6.5	1,222	1,176	46	31.7	14.5	17.1
1945	...	...	4.2	809	759	50	30.2	11.4	18.8
1946	...	132,916	5.2	1,129	1,003	126	67.3	15.7	51.6
1947	...	112,897	14.3	3,474	3,103	371	204.6	63.7	140.9
1948	101.9	96,346	20.4	5,250	4,853	397	234.6	93.9	140.7
1949	86.4	85,640	34.4	9,246	8,708	538	308.1	161.4	146.7
1950	90.6	93,092	34.3	9,162	8,746	416	248.3	151.2	97.1
1951	89.5	83,778	30.7	8,058	7,626	432	259.5	131.6	128.0
1952	93.3	92,946	28.7	7,611	7,081	530	283.3	131.9	151.4
1953	91.7	102,706	33.2	8,862	8,075	787	394.2	167.5	226.6
1954	91.0	117,411	42.0	11,086	10,226	860	462.6	211.4	251.2
1955	98.4	139,915	41.6	10,969	10,113	856	449.4	206.4	243.0
1956	96.6	141,163	48.0	12,686	11,615	1,071	562.7	239.8	322.9
1957	92.4	137,112	51.7	13,739	12,547	1,192	615.3	267.1	348.2
1958	92.2	150,781	55.9	14,964	13,499	1,465	728.3	297.6	430.7
1959	98.7	193,067	51.8	14,053	12,707	1,346	692.8	278.9	413.9
1960	95.5	182,713	57.0	15,445	13,650	1,795	938.6	327.2	611.4
1961	92.1	181,535	64.4	17,075	15,006	2,069	1,090.1	370.1	720.0
1962	93.7	182,057	60.8	15,782	13,772	2,010	1,213.6	346.5	867.1
1963	95.2	186,404	56.3	14,374	12,192	2,182	1,352.6	321.0	1,031.6
1964	98.6	197,724	53.2	13,501	11,346	2,155	1,329.2	313.6	1,015.6
1965	100.2	203,897	53.3	13,514	11,340	2,174	1,321.7	321.7	1,000.0
1966	99.4	200,010	51.6	13,061	10,833	2,228	1,385.7	321.5	1,064.1
1967	100.0	206,569	49.0	12,364	10,144	2,220	1,265.2	297.9	967.3
1968	106.8	233,635	38.6	9,636	7,829	1,807	941.0	241.1	699.9
1969	112.9	274,267	37.3	9,154	7,192	1,962	1,142.1	231.3	910.8
1970	106.4	264,209	43.8	10,748	8,019	2,729	1,887.8	269.3	1,618.4
1971	108.5	287,577	41.7	10,326	7,611	2,715	1,916.9	271.3	1,645.6
1972	115.9	316,601	38.3	9,566	7,040	2,526	2,000.2	258.8	1,741.5
1973	114.9	329,358	36.4	9,345	6,627	2,718	2,298.6	235.6	2,063.0
1974	109.2	319,149	38.4	9,915	6,733	3,182	3,053.1	256.9	2,796.3
1975	107.0	326,345	42.6	11,432	7,504	3,928	4,380.2	298.6	4,081.6
1976	115.6	375,766	34.8	9,628	6,176	3,452	3,011.3	257.8	2,753.4
1977	123.2	436,170	28.4	7,919	4,861	3,058	3,095.3	208.3	2,887.0
1978	128.2	478,019	23.9	6,619	3,712	2,907	2,656.0	164.7	2,491.3
1979	128.3	524,565	27.8	7,564	3,930	3,634	2,667.4	179.9	2,487.5
1980	122.4	533,520	42.1	11,742	5,682	6,060	4,635.1	272.5	4,362.6
1981	118.6	581,242	61.3	16,794	8,233	8,561	6,955.2	405.8	6,549.3
1982	113.2	566,942	89.0	24,908	11,509	13,399	15,610.8	541.7	15,069.1
1983	114.8	600,400	110.0	31,334	15,509	15,825	16,072.9	635.1	15,437.8
1984	117.1	634,991	...	...	...	...	...	...	...
	Seasonally adjusted								
1984: Jan	115.9	53,044	...	4,481	1,494	2,987	1,783.3	34.5	1,748.8
Feb	117.2	53,591	...	4,174	1,545	2,629	1,713.1	34.3	1,678.8
Mar	116.9	53,424	...	5,750	1,848	3,902	3,479.7	37.0	3,442.7
Apr	117.5	53,933	...	4,334	1,485	2,849	2,429.4	31.5	2,397.9
May	115.7	51,166	...	3,964	1,444	2,520	3,074.3	30.7	3,043.5
June	117.0	54,729	...	4,960	1,603	3,357	3,427.4	34.7	3,392.7
July	115.8	52,092	...	3,673	1,230	2,443	2,783.7	24.6	2,759.1
Aug	119.1	51,723	...	4,533	1,593	2,940	1,968.7	31.9	1,936.8
Sept	119.7	52,237	...	3,922	1,369	2,553	2,045.6	28.6	2,017.0
Oct	117.7	52,587	...	...	...	...	...	...	...
Nov	116.0	53,490	...	...	...	...	...	...	...
Dec	116.6	53,503	...	...	...	...	...	...	...
1985: Jan	117.8	52,419	...	3,675	1,325	2,350	1,872.0	25.3	1,846.7
Feb	118.7	54,371	...	4,226	1,445	2,781	2,378.4	27.8	2,350.6
Mar	116.6	55,589	...	5,768	1,755	4,013	3,790.7	33.4	3,757.3
Apr	116.6	55,710	...	4,586	1,464	3,122	3,279.8	29.2	3,250.6
May	114.3	56,124	...	5,914	1,769	4,145	3,261.9	35.5	3,226.4
June	116.5	55,339	...	4,388	1,508	2,880	2,995.6	27.5	2,968.1
July	116.3	53,926	...	4,185	1,505	2,680	2,150.5	27.3	2,123.2
Aug	117.6	55,418	...	5,468	1,779	3,689	3,162.4	29.3	3,133.1
Sept	117.4	55,999	...	4,146	1,533	2,613	1,925.3	26.6	1,898.7
Oct	116.2	57,576	...	...	...	...	...	...	...
Nov	117.1	54,773	...	...	...	...	...	...	...
Dec	115.1	...	...	...	...	...	...	...	...

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[1] Commercial and industrial failures only through 1983, excluding failures of banks, railroads, real estate, insurance, holding, and financial companies, steamship lines, travel agencies, etc.

Data for 1984–85 based on expanded coverage and new methodology and are therefore not generally comparable with earlier data. Data for 1985 are subject to revision due to amended court filings.

[2] Failure rate per 10,000 listed enterprises.

Sources: Department of Commerce (Bureau of Economic Analysis) and The Dun & Bradstreet Corporation.

AGRICULTURE

TABLE B–93.—*Farm income, 1929–85*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Year or quarter	Income of farm operators from farming							
	Gross farm income					Production expenses	Net farm income	
	Total [1]	Cash marketing receipts			Value of inventory changes [2]		Current dollars	1967 dollars [3]
		Total	Livestock and products	Crops				
1929	13.8	11.3	6.2	5.1	−0.1	7.7	6.2	12.0
1933	6.9	5.3	2.8	2.5	−.2	4.4	2.6	6.6
1939	10.7	7.9	4.5	3.3	.1	6.3	4.4	10.6
1940	11.3	8.4	4.9	3.5	.3	6.9	4.5	10.7
1941	14.3	11.1	6.5	4.6	.4	7.8	6.5	14.7
1942	19.9	15.6	9.0	6.5	1.1	10.0	9.9	20.2
1943	23.3	19.6	11.5	8.1	−.1	11.6	11.7	22.7
1944	24.0	20.5	11.4	9.2	−.4	12.3	11.7	22.2
1945	25.4	21.7	12.0	9.7	−.4	13.1	12.3	22.8
1946	29.6	24.8	13.8	11.0	.0	14.5	15.1	25.8
1947	32.4	29.6	16.5	13.1	−1.8	17.0	15.4	23.0
1948	36.5	30.2	17.1	13.1	1.7	18.8	17.7	24.5
1949	30.8	27.8	15.4	12.4	−.9	18.0	12.8	17.9
1950	33.1	28.5	16.1	12.4	.8	19.5	13.6	18.9
1951	38.3	32.9	19.6	13.2	1.2	22.3	15.9	20.5
1952	37.8	32.5	18.2	14.3	.9	22.8	15.0	18.8
1953	34.4	31.0	16.9	14.1	−.6	21.5	13.0	16.2
1954	34.2	29.8	16.3	13.6	.5	21.8	12.4	15.4
1955	33.5	29.5	16.0	13.5	.2	22.2	11.3	14.1
1956	34.0	30.4	16.4	14.0	−.5	22.7	11.3	13.8
1957	34.8	29.7	17.4	12.3	.6	23.7	11.1	13.1
1958	39.0	33.5	19.2	14.2	.8	25.8	13.2	15.2
1959	37.9	33.6	18.9	14.7	.0	27.2	10.7	12.3
1960	38.9	34.2	19.0	15.3	.4	27.4	11.5	13.0
1961	40.5	35.2	19.5	15.7	.3	28.6	12.0	13.3
1962	42.3	36.5	20.2	16.3	.6	30.3	12.1	13.3
1963	43.4	37.5	20.0	17.4	.6	31.6	11.8	12.8
1964	42.3	37.3	19.9	17.4	−.8	31.8	10.5	11.3
1965	46.5	39.4	21.9	17.5	1.0	33.7	12.9	13.7
1966	50.5	43.4	25.0	18.4	−.1	36.5	14.0	14.4
1967	50.5	42.8	24.4	18.4	.7	38.2	12.3	12.3
1968	51.8	44.2	25.5	18.7	.1	39.5	12.3	11.8
1969	56.4	48.2	28.6	19.6	.1	42.1	14.3	13.0
1970	58.8	50.5	29.5	21.0	.0	44.5	14.4	12.4
1971	62.1	52.7	30.5	22.3	1.4	47.1	15.0	12.4
1972	71.2	61.1	35.6	25.5	.9	51.7	19.5	15.6
1973	99.0	86.9	45.8	41.1	3.4	64.6	34.4	25.9
1974	98.3	92.4	41.3	51.1	−1.6	71.0	27.3	18.5
1975	100.6	88.9	43.1	45.8	3.4	75.0	25.6	15.9
1976	102.9	95.4	46.3	49.0	−1.5	82.7	20.1	11.8
1977	108.7	96.2	47.6	48.6	1.1	88.9	19.8	10.9
1978	128.4	112.2	59.2	53.0	2.1	101.0	27.4	14.0
1979	150.7	131.5	69.2	62.3	5.0	119.0	31.7	14.6
1980	149.6	139.8	68.0	71.8	−5.9	129.4	20.2	8.2
1981	166.0	142.1	69.2	72.9	5.8	136.1	29.8	11.0
1982	161.6	142.9	70.3	72.7	−1.4	136.9	24.6	8.5
1983	150.6	136.3	69.4	66.8	−10.6	135.6	15.0	5.0
1984	174.0	141.8	72.7	69.1	7.8	139.5	34.5	11.1
1983: I	152.9	143.2	71.0	72.2	−10.6	135.1	17.8	6.1
II	143.6	133.0	68.9	64.1	−13.9	134.9	8.7	2.9
III	151.7	141.2	67.9	73.3	−12.9	135.5	16.2	5.4
IV	154.3	127.6	70.0	57.6	−4.9	136.9	17.3	5.7
1984: I	175.7	139.3	75.5	63.8	2.0	139.2	36.5	11.9
II	167.3	139.0	70.8	68.2	8.7	140.2	27.0	8.7
III	173.7	141.5	71.2	70.3	10.3	140.0	33.6	10.7
IV	179.8	147.6	73.5	74.2	10.2	138.5	41.2	13.1
1985: I	168.0	137.6	72.3	65.3	3.3	136.6	31.4	9.9
II	161.7	131.3	67.3	64.0	.8	134.7	27.0	8.4
III	150.6	132.6	68.5	64.1	−.8	133.2	17.4	5.4

[1] Cash marketing receipts and inventory changes plus Government payments, other farm cash income, and nonmoney income furnished by farms.

[2] Physical changes in end-of-period inventory of crop and livestock commodities valued at average prices during the period.

[3] Income in current dollars divided by the consumer price index (Department of Labor).

Note.—Data include net Commodity Credit Corporation loans and operator households.

Source: Department of Agriculture, except as noted.

TABLE B–94.—*Farm output and productivity indexes, 1929–85*

[1977 = 100]

Year	Farm output						Productivity indicators				
	Total [1]	Crops [2]				Livestock and products [2]	Farm output per unit of total input	Crop production per acre [4]	Farm output per hour of farm work		
		Total [3]	Feed grains	Food grains	Oil crops				Total	Crops	Livestock and products
1929	44	48	38	39	6	50	45	48	9	10	14
1933	42	43	35	27	5	54	46	43	9	10	13
1939	48	49	40	36	14	56	51	51	11	12	14
1940	50	51	41	40	16	57	52	53	12	13	14
1941	52	52	44	45	16	60	54	54	13	14	15
1942	58	58	51	48	23	67	58	59	14	15	16
1943	57	55	47	41	23	72	57	55	14	15	16
1944	59	58	49	51	20	69	58	58	14	16	16
1945	58	56	47	53	20	68	58	57	15	16	16
1946	60	59	51	55	19	66	60	60	16	18	17
1947	58	56	39	64	22	65	58	57	16	18	17
1948	63	64	57	62	27	64	63	64	18	20	18
1949	62	61	50	53	26	67	61	60	19	20	18
1950	61	59	51	49	26	70	61	59	19	22	19
1951	63	60	47	49	26	73	61	59	20	22	20
1952	66	62	50	63	26	74	63	62	22	24	21
1953	66	62	49	57	26	74	64	62	23	25	22
1954	66	61	51	51	28	77	65	61	24	26	23
1955	69	63	54	48	30	79	67	63	26	28	24
1956	69	63	54	50	34	79	68	64	28	30	25
1957	67	62	58	47	33	78	69	65	29	33	26
1958	73	69	64	69	39	79	74	73	33	38	28
1959	74	68	66	55	36	83	74	72	35	37	31
1960	76	72	69	66	38	82	77	77	37	41	32
1961	76	70	62	60	43	86	78	78	39	42	35
1962	77	71	62	56	44	86	79	81	41	45	37
1963	80	74	68	59	46	89	82	83	45	47	40
1964	79	72	59	65	46	91	81	81	47	49	43
1965	82	76	70	67	53	89	86	85	52	56	45
1966	79	73	70	67	55	91	83	83	53	59	49
1967	83	77	79	76	56	94	86	86	58	63	53
1968	85	79	75	80	64	94	87	89	62	66	55
1969	85	80	78	74	65	95	88	91	63	68	59
1970	84	77	71	69	66	99	87	88	66	70	64
1971	92	86	92	81	68	100	94	96	74	79	68
1972	91	87	88	77	74	101	94	99	78	84	73
1973	93	92	91	86	87	99	95	99	81	87	76
1974	88	84	74	91	71	100	90	88	79	80	82
1975	95	93	91	108	86	95	99	96	89	89	85
1976	97	92	96	107	74	99	98	94	94	91	93
1977	100	100	100	100	100	100	100	100	100	100	100
1978	104	102	108	93	105	101	102	105	108	105	109
1979	111	113	116	108	129	104	105	113	119	118	117
1980	103	101	97	121	99	108	101	100	112	104	129
1981	118	116	121	144	114	109	116	114	131	120	136
1982	116	118	124	140	124	107	117	117	133	126	143
1983	95	88	67	117	89	109	100	100	120	105	154
1984	111	110	115	129	106	107	116	111	139	124	162
1985 [p]	117	117	132	120	119	110	117	118	139	125	160

[1] Farm output measures the annual volume of net farm production available for eventual human use through sales from farms or consumption in farm households.

[2] Gross production.

[3] Includes items not included in groups shown.

[4] Computed from variable weights for individual crops produced each year.

Source: Department of Agriculture.

TABLE B–95.—*Farm input use, selected inputs, 1929–85*

Year	Farm population April[1]		Farm employment (thousands)[3]			Crops harvested (millions of acres)[4]	Selected indexes of input use (1977=100)					
	Number (thousands)	As percent of total population[2]	Total	Family workers	Hired workers		Total	Farm labor	Farm real estate	Mechanical power and machinery	Agricultural chemicals[5]	Feed, seed, and livestock purchases[6]
1929	30,580	25.1	12,763	9,360	3,403	365	99	468	107	33	6	28
1933	32,393	25.8	12,739	9,874	2,865	340	93	456	100	27	4	26
1939	30,840	23.5	11,338	8,611	2,727	331	96	418	105	34	7	37
1940	30,547	23.1	10,979	8,300	2,679	341	97	416	107	36	9	39
1941	30,118	22.6	10,669	8,017	2,652	344	97	410	105	37	9	42
1942	28,914	21.4	10,504	7,949	2,555	348	100	420	103	44	10	44
1943	26,186	19.2	10,446	8,010	2,436	357	102	414	102	47	11	48
1944	24,815	17.9	10,219	7,988	2,231	362	103	411	101	49	13	48
1945	24,420	17.5	10,000	7,881	2,119	354	100	385	102	50	13	50
1946	25,403	18.0	10,295	8,106	2,189	352	99	369	106	49	14	49
1947	25,829	17.9	10,382	8,115	2,267	355	99	350	106	54	15	51
1948	24,383	16.6	10,363	8,026	2,337	356	100	340	107	62	16	52
1949	24,194	16.2	9,964	7,712	2,252	360	102	328	108	68	18	56
1950	23,048	15.2	9,926	7,597	2,329	345	101	309	109	72	19	58
1951	21,890	14.2	9,546	7,310	2,236	344	104	309	109	77	21	62
1952	21,748	13.9	9,149	7,005	2,144	349	104	295	108	81	23	63
1953	19,874	12.5	8,864	6,775	2,089	348	103	284	108	82	24	63
1954	19,019	11.7	8,651	6,570	2,081	346	102	273	108	82	24	65
1955	19,078	11.5	8,381	6,345	2,036	340	102	263	108	83	26	66
1956	18,712	11.1	7,852	5,900	1,952	324	101	248	106	84	27	69
1957	17,656	10.3	7,600	5,660	1,940	324	98	231	105	83	27	68
1958	17,128	9.8	7,503	5,521	1,982	324	98	221	104	83	28	73
1959	16,592	9.3	7,342	5,390	1,952	324	99	215	105	84	32	77
1960	15,635	8.7	7,057	5,172	1,885	324	98	206	103	83	32	77
1961	14,803	8.1	6,919	5,029	1,890	302	97	198	103	80	35	81
1962	14,313	7.7	6,700	4,873	1,827	295	97	189	104	80	38	83
1963	13,367	7.1	6,518	4,738	1,780	298	97	183	104	79	43	83
1964	12,954	6.7	6,110	4,506	1,604	298	97	173	104	80	46	85
1965	12,363	6.4	5,610	4,128	1,482	298	96	156	103	80	49	86
1966	11,595	5.9	5,214	3,854	1,360	294	96	146	102	82	56	89
1967	10,875	5.5	4,903	3,650	1,253	306	98	142	104	85	66	92
1968	10,454	5.2	4,749	3,535	1,213	300	97	137	102	86	69	89
1969	10,307	5.1	4,596	3,419	1,176	290	97	132	102	86	73	93
1970	9,712	4.7	4,523	3,348	1,175	293	97	126	105	85	75	96
1971	9,425	4.5	4,436	3,275	1,161	305	98	123	103	87	81	102
1972	9,610	4.6	4,373	3,228	1,146	294	97	116	102	86	86	104
1973	9,472	4.5	4,337	3,169	1,168	321	98	114	100	90	90	107
1974	9,264	4.3	4,389	3,075	1,314	328	98	111	99	92	92	99
1975	8,864	4.1	4,342	3,026	1,317	336	96	107	97	96	83	93
1976	8,253	3.8	4,374	2,997	1,377	337	99	103	98	98	96	101
1977	[7] 6,194	[7] 2.8	4,155	2,859	1,296	345	100	100	100	100	100	100
1978	[7] 6,501	[7] 2.9	3,957	2,689	1,268	338	102	96	100	104	107	108
1979	[7] 6,241	[7] 2.8	3,774	2,501	1,273	348	105	93	103	104	123	115
1980	[7] 6,051	[7] 2.7	3,705	2,402	1,303	352	103	92	103	101	123	114
1981	[7] 5,790	[7] 2.5	[8] 3,641	[8] 2,324	[8] 1,317	366	102	90	103	98	129	108
1982	[7] 5,620	[7] 2.4	3,578	2,248	1,330	362	99	87	103	94	118	106
1983	[7] 5,787	[7] 2.5	3,518	2,174	1,344	306	95	79	101	89	105	106
1984	5,754	2.4	3,461	2,103	1,358	348	96	80	99	88	120	106
1985 [p]	5,355	2.2	3,365	2,018	[9] 1,347	347	100					

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[1] Farm population as defined by Department of Agriculture and Department of Commerce, i.e., civilian population living on farms in rural areas, regardless of occupation. See also footnote 7.

[2] Total population of United States including Armed Forces overseas, as of July 1.

[3] Includes persons doing farmwork on all farms. These data, published by the Department of Agriculture, differ from those on agricultural employment by the Department of Labor (see Table B–31) because of differences in the method of approach, in concepts of employment, and in time of month for which the data are collected.

[4] Acreage harvested plus acreages in fruits, tree nuts, and farm gardens.

[5] Fertilizer, lime, and pesticides.

[6] Nonfarm constant dollar value of feed, seed, and livestock purchases.

[7] Based on new definition of a farm. Under old definition of a farm, farm population (in thousands and as percent of total population) for 1977, 1978, 1979, 1980, 1981, 1982, and 1983 is 7,806 and 3.6, 8,005 and 3.6, 7,553 and 3.4, 7,241 and 3.2, 6,942 and 3.0, 6,870 and 3.0, 7,029 and 3.0, respectively.

[8] Basis for farm employment series was discontinued for 1981 through 1984. Employment is estimated for these years.

[9] Includes agricultural service workers working on farms.

Note.—Population includes Alaska and Hawaii beginning 1960.

Sources: Department of Agriculture and Department of Commerce (Bureau of the Census).

Table B–96.—*Indexes of prices received and prices paid by farmers, 1946–85*

[1977 = 100]

Year or month	Prices received by farmers: All farm products	Prices received by farmers: Crops	Prices received by farmers: Livestock and products	Prices paid by farmers: All commodities, services, interest, taxes, and wage rates [1]	Production items: Total [2]	Production items: Tractors and self-propelled machinery	Production items: Fertilizer	Production items: Fuels and energy	Wage rates	Addendum: Average farm real estate value per acre [3]
1946	52	53	50	30	33	...	45	...	20	11
1947	60	61	60	35	39	...	50	...	22	13
1948	63	59	65	38	43	...	55	...	23	14
1949	55	52	56	36	41	...	56	...	22	14
1950	56	54	58	37	42	...	54	...	22	14
1951	66	61	70	41	47	...	57	...	25	16
1952	63	62	64	42	47	...	59	...	26	18
1953	56	55	56	40	44	...	59	...	27	18
1954	54	56	52	40	44	...	59	...	27	18
1955	51	53	49	40	43	...	58	...	27	19
1956	50	54	47	40	43	...	57	...	28	19
1957	51	52	51	42	44	...	58	...	29	21
1958	55	52	57	43	46	...	58	...	30	22
1959	53	51	53	43	46	...	57	...	32	23
1960	52	51	53	44	46	...	57	...	33	24
1961	53	52	52	44	46	...	58	...	33	25
1962	53	54	53	45	47	...	58	...	34	26
1963	53	55	51	45	47	...	57	...	35	27
1964	52	55	49	45	47	...	57	...	36	29
1965	54	53	54	47	48	39	57	49	38	31
1966	58	55	60	49	50	40	56	49	41	33
1967	55	52	57	49	50	42	55	50	44	35
1968	56	52	60	51	50	44	52	50	48	38
1969	59	50	67	53	52	47	48	51	53	40
1970	60	52	67	55	54	49	48	52	57	42
1971	62	56	67	58	57	51	50	53	59	43
1972	69	60	77	62	61	54	52	54	63	47
1973	98	91	104	71	73	58	56	57	69	53
1974	105	117	94	81	83	68	92	79	79	66
1975	101	105	98	89	91	82	120	88	85	75
1976	102	102	101	95	97	91	102	93	93	86
1977	100	100	100	100	100	100	100	100	100	100
1978	115	105	124	108	108	109	100	105	107	109
1979	132	116	147	123	125	122	108	137	117	125
1980	134	125	144	138	138	136	134	188	126	145
1981	139	134	143	150	148	152	144	213	137	158
1982	133	121	145	157	150	165	144	210	144	157
1983	134	127	141	160	153	174	137	202	148	148
1984	142	138	146	164	155	181	143	201	150	146
1985	128	120	136	164	151	178	135	201	154	128
1984: Jan	145	139	151	163	155	177	136	202	150	...
Feb	144	138	151	164	155	177	136	203	150	...
Mar	145	139	151	164	157	180	146	203	150	146
Apr	145	140	150	165	157	180	146	203	150	...
May	145	145	145	165	157	180	147	203	150	...
June	144	144	144	165	156	182	147	203	150	...
July	145	144	145	164	155	182	147	201	150	...
Aug	143	143	143	164	154	182	147	199	150	...
Sept	138	135	141	164	154	182	147	200	150	...
Oct	138	137	138	163	152	182	141	201	150	...
Nov	136	129	143	164	153	182	141	200	150	...
Dec	135	125	145	163	152	182	139	198	150	...
1985: Jan	135	126	145	165	154	182	139	195	154	...
Feb	135	125	145	165	154	182	139	192	154	...
Mar	134	127	141	164	153	180	137	195	154	...
Apr	131	125	136	165	153	180	137	201	158	128
May	129	124	134	165	152	180	135	203	158	...
June	128	122	134	164	151	177	135	204	158	...
July	126	121	130	164	150	177	135	204	154	
Aug	121	114	128	163	150	177	135	203	154	
Sept	121	112	128	162	148	174	135	203	154	
Oct	123	111	134	162	148	174	130	202	150	
Nov	127	115	138	163	149	174	130	205	150	
Dec	128	117	139	163	149	174	128	206	150	

[1] Includes items used for family living, not shown separately.

[2] Includes other items not shown separately.

[3] Average for 48 States. Annual data are for March 1 of each year through 1975, for February 1 for 1976 through 1981, and for April 1 for 1982 through 1985.

Source: Department of Agriculture.

Table B-97.—*U.S. exports and imports of agricultural commodities, 1940–85*

[Billions of dollars]

Year	Exports							Imports					Agricultural trade balance
	Total [1]	Feed grains	Food grains [2]	Oilseeds and products	Cotton	Tobacco	Animals and products	Total [1]	Crops, fruits, and vegetables [3]	Animals and products	Coffee	Cocoa beans and products	
1940	0.5	(4)	(4)	(4)	0.2	(4)	0.1	1.3	(4)	0.2	0.1	(4)	−0.8
1941	.7	(4)	0.1	(4)	.1	0.1	.3	1.7	0.1	.3	.2	(4)	−1.0
1942	1.2	(4)	(4)	(4)	.1	.1	.8	1.3	(4)	.5	.2	(4)	−.1
1943	2.1	(4)	.1	0.1	.2	.2	1.2	1.5	.1	.4	.3	(4)	.6
1944	2.1	(4)	.1	.1	.1	.1	1.3	1.8	.1	.3	.3	(4)	.3
1945	2.3	(4)	.4	(4)	.3	.2	.9	1.7	.1	.4	.3	(4)	.5
1946	3.1	0.1	.7	(4)	.5	.4	.9	2.3	.2	.4	.5	0.1	.8
1947	4.0	.4	1.4	.1	.4	.3	.7	2.8	.1	.4	.6	.2	1.2
1948	3.5	.1	1.5	.2	.5	.2	.5	3.1	.2	.6	.7	.2	.3
1949	3.6	.3	1.1	.3	.9	.3	.4	2.9	.2	.4	.8	.1	.7
1950	2.9	.2	.6	.2	1.0	.3	.3	4.0	.2	.7	1.1	.2	−1.1
1951	4.0	.3	1.1	.3	1.1	.3	.5	5.2	.2	1.1	1.4	.2	−1.1
1952	3.4	.3	1.1	.2	.9	.2	.3	4.5	.2	.7	1.4	.2	−1.1
1953	2.8	.3	.7	.2	.5	.3	.4	4.2	.2	.6	1.5	.2	−1.3
1954	3.1	.2	.5	.3	.8	.3	.5	4.0	.2	.5	1.5	.3	−.9
1955	3.2	.3	.6	.4	.5	.4	.6	4.0	.2	.5	1.4	.2	−.8
1956	4.2	.4	1.0	.5	.7	.3	.7	4.0	.2	.4	1.4	.2	.2
1957	4.5	.3	1.0	.5	1.0	.4	.7	4.0	.2	.5	1.4	.2	.6
1958	3.9	.5	.8	.4	.7	.4	.5	3.9	.2	.7	1.2	.2	(4)
1959	4.0	.6	.9	.6	.4	.3	.6	4.1	.2	.8	1.1	.2	−.1
1960	4.8	.5	1.2	.6	1.0	.4	.6	3.8	.2	.6	1.0	.2	1.0
1961	5.0	.5	1.4	.6	.9	.4	.6	3.7	.2	.7	1.0	.2	1.3
1962	5.0	.8	1.3	.7	.5	.4	.6	3.9	.2	.9	1.0	.2	1.2
1963	5.6	.8	1.5	.8	.6	.4	.7	4.0	.3	.9	1.0	.2	1.6
1964	6.3	.9	1.7	1.0	.7	.4	.8	4.1	.3	.8	1.2	.2	2.3
1965	6.2	1.1	1.4	1.2	.5	.4	.8	4.1	.3	.9	1.1	.1	2.1
1966	6.9	1.3	1.8	1.2	.4	.5	.7	4.5	.4	1.2	1.1	.1	2.4
1967	6.4	1.1	1.5	1.3	.5	.5	.7	4.5	.4	1.1	1.0	.2	1.9
1968	6.3	.9	1.4	1.3	.5	.5	.7	5.0	.5	1.3	1.2	.2	1.3
1969	6.0	.9	1.2	1.3	.3	.6	.8	5.0	.5	1.4	.9	.2	1.1
1970	7.3	1.1	1.4	1.9	.4	.5	.9	5.8	.5	1.6	1.2	.3	1.5
1971	7.7	1.0	1.3	2.2	.6	.5	1.0	5.8	.6	1.5	1.2	.2	1.9
1972	9.4	1.5	1.8	2.4	.5	.7	1.1	6.5	.7	1.8	1.3	.2	2.9
1973	17.7	3.5	4.7	4.3	.9	.7	1.6	8.4	.8	2.6	1.7	.3	9.3
1974	21.9	4.6	5.4	5.7	1.3	.8	1.8	10.2	.8	2.2	1.6	.5	11.7
1975	21.9	5.2	6.2	4.5	1.0	.9	1.7	9.3	.8	1.8	1.7	.5	12.6
1976	23.0	6.0	4.7	5.1	1.0	.9	2.4	11.0	.9	2.3	2.9	.6	12.0
1977	23.6	4.9	3.6	6.6	1.5	1.1	2.7	13.4	1.2	2.3	4.2	1.0	10.2
1978	29.4	5.9	5.5	8.2	1.7	1.4	3.0	14.8	1.5	3.1	4.0	1.4	14.6
1979	34.7	7.7	6.3	8.9	2.2	1.2	3.8	16.7	1.7	3.9	4.2	1.2	18.0
1980	41.2	9.8	7.9	9.4	2.9	1.3	3.8	17.4	1.7	3.8	4.2	.9	23.9
1981	43.3	9.4	9.6	9.6	2.3	1.5	4.2	16.8	2.0	3.5	2.9	.9	26.6
1982	36.6	6.4	7.9	9.1	2.0	1.5	3.9	15.3	2.3	3.7	2.9	.7	21.3
1983	36.1	7.3	7.4	8.7	1.8	1.5	3.8	16.5	2.3	3.8	2.8	.8	19.6
1984	37.8	8.1	7.5	8.4	2.4	1.5	4.2	19.3	3.1	4.1	3.3	1.1	18.5
Jan–Nov:													
1984	34.3	7.3	6.9	7.5	2.2	1.3	3.9	17.9	2.2	3.7	3.1	1.0	16.4
1985	26.4	5.5	4.1	5.0	1.6	1.3	3.8	18.1	2.4	3.8	3.0	1.2	8.3

[1] Total includes items not shown separately.

[2] Rice, wheat, and wheat flour.

[3] Includes nuts, fruits, and vegetable preparations.

[4] Less than $50 million.

Note.—Data derived from official estimates released by the Bureau of the Census, Department of Commerce. Agricultural commodities are defined as (1) nonmarine food products and (2) other products of agriculture which have not passed through complex processes of manufacture. Export value, at U.S. port of exportation, is based on the selling price and includes inland freight, insurance, and other charges to the port. Import value, defined generally as the market value in the foreign country, excludes import duties, ocean freight, and marine insurance.

Source: Department of Agriculture.

TABLE B-98.—*Balance sheet of the farm sector, 1939-84*

[Billions of dollars]

End of year	Assets									Claims			
	Total	Real estate	Livestock [1]	Other physical assets			Financial assets			Total	Real estate debt	Other debt	Proprietors' equities
				Machinery and motor vehicles	Crops [2]	Household equipment and furnishings	Deposits and currency	U.S. savings bonds	Investments in cooperatives				
1939	53.0	33.6	5.1	3.1	2.7	4.2	3.2	0.2	0.8	53.0	6.6	3.4	43.0
1940	54.8	34.4	5.3	3.2	3.0	4.1	3.5	.4	.9	54.8	6.5	4.0	44.3
1941	62.9	37.5	7.1	4.0	3.8	4.8	4.2	.5	.9	62.9	6.4	4.1	52.4
1942	73.6	41.6	9.6	4.9	5.1	4.8	5.4	1.1	1.0	73.6	6.0	3.9	63.7
1943	84.0	48.2	9.7	5.4	6.1	4.7	6.6	2.2	1.1	84.0	5.4	3.5	75.1
1944	93.8	53.9	9.0	6.5	6.7	5.2	7.9	3.4	1.2	93.8	4.9	3.4	85.4
1945	102.9	61.0	9.7	5.4	6.3	5.5	9.4	4.2	1.4	102.9	4.8	3.1	95.0
1946	115.9	68.5	11.9	5.3	7.1	7.2	10.2	4.2	1.5	115.9	4.9	3.5	107.5
1947	127.4	73.7	13.3	7.4	9.0	8.1	9.9	4.4	1.7	127.4	5.1	4.2	118.1
1948	134.6	76.6	14.4	10.1	8.6	8.9	9.6	4.6	1.9	134.6	5.3	6.1	123.3
1949	134.5	77.6	12.9	12.2	7.6	8.4	9.1	4.7	2.1	134.5	5.6	6.9	122.1
1950	154.3	89.5	17.1	14.1	7.9	9.6	9.1	4.7	2.3	154.3	6.1	6.9	141.2
1951	170.1	98.5	19.5	16.7	8.8	10.1	9.4	4.7	2.5	170.1	6.7	8.0	155.5
1952	167.6	100.1	14.8	17.4	9.0	9.5	9.4	4.6	2.7	167.6	7.2	8.9	151.5
1953	164.5	98.7	11.7	18.4	9.1	9.5	9.4	4.7	2.8	164.5	7.7	9.2	147.6
1954	168.9	102.2	11.2	18.7	9.6	9.7	9.4	5.0	3.0	168.9	8.2	9.4	151.2
1955	173.6	107.5	10.6	19.3	8.3	10.0	9.5	5.2	3.2	173.6	9.0	9.8	154.8
1956	182.7	115.7	11.0	20.2	8.3	9.6	9.4	5.1	3.4	182.7	9.8	9.5	163.4
1957	191.3	121.7	13.9	20.1	7.6	9.6	9.5	5.1	3.7	191.3	10.4	10.0	170.8
1958	208.4	131.1	17.7	21.8	9.3	9.4	10.0	5.2	3.9	208.4	11.1	12.5	184.7
1959	210.2	137.2	15.2	22.7	7.7	9.2	9.2	4.7	4.2	210.2	12.1	12.7	185.4
1960	210.9	138.5	15.6	22.2	8.0	8.7	8.7	4.6	4.5	210.9	12.8	13.4	184.7
1961	219.3	144.5	16.4	22.5	8.8	8.9	8.8	4.5	4.8	219.3	13.9	14.6	190.9
1962	227.6	150.2	17.3	23.5	9.3	8.8	9.2	4.4	5.0	227.6	15.2	16.2	196.2
1963	235.7	158.6	15.9	23.9	9.8	8.8	9.2	4.2	5.4	235.7	16.8	18.1	200.8
1964	243.8	167.5	14.5	24.8	9.2	8.4	9.6	4.2	5.6	243.8	18.9	17.9	207.0
1965	260.8	179.2	17.6	26.0	9.7	8.4	10.0	4.0	5.9	260.8	21.2	19.5	220.1
1966	274.2	189.1	19.0	27.4	10.0	8.3	10.3	3.9	6.2	274.2	23.1	20.9	230.2
1967	288.0	199.7	18.8	29.8	9.6	8.8	10.9	3.8	6.5	288.0	25.1	22.3	240.6
1968	302.8	209.2	20.2	31.3	10.6	9.4	11.5	3.7	6.8	302.8	27.4	23.1	252.3
1969	314.9	215.8	23.5	32.3	10.9	9.6	11.9	3.7	7.2	314.9	29.2	23.8	261.9
1970	326.0	223.2	23.7	34.4	10.7	10.0	12.4	3.6	8.0	326.0	30.3	24.1	271.5
1971	351.8	239.6	27.3	36.6	11.8	10.8	13.1	3.7	8.8	351.8	32.2	27.4	292.2
1972	394.8	267.4	34.1	39.3	14.5	11.9	14.0	4.0	9.8	394.8	35.1	29.8	330.0
1973	478.6	327.8	42.4	44.2	22.0	12.3	14.9	4.2	10.9	478.6	39.5	33.8	405.2
1974 [3]	502.7	359.7	24.5	54.7	23.3	11.2	14.0	3.8	11.4	502.7	44.7	37.1	420.9
1975	576.4	418.2	29.4	64.0	21.3	11.7	14.5	3.9	13.4	576.4	49.7	42.0	484.7
1976	664.3	496.4	29.0	71.0	22.1	12.1	14.8	3.8	14.9	664.3	55.3	48.8	560.2
1977	736.6	554.8	31.9	76.9	24.8	13.7	15.1	3.9	15.4	736.6	63.5	59.5	613.6
1978	873.2	654.7	51.3	85.1	28.0	16.0	15.5	4.2	18.3	873.2	71.6	69.5	732.1
1979	1,015.3	765.7	61.4	96.7	33.5	17.2	15.9	4.0	20.8	1,015.3	85.6	80.5	849.3
1980	1,108.3	846.6	60.6	102.5	36.5	19.4	16.2	3.8	22.8	1,108.3	95.8	86.5	926.0
1981	1,111.1	846.7	53.5	108.8	36.1	20.8	16.7	3.6	24.8	1,111.1	105.8	96.3	909.0
1982	1,082.0	808.6	53.0	108.8	40.6	23.0	17.4	3.5	27.2	1,082.0	110.0	107.2	864.8
1983	1,061.4	798.0	49.7	105.8	33.2	24.4	18.2	3.6	28.5	1,061.4	112.6	103.6	845.1
1984 p	955.8	693.7	49.6	99.4	33.7	26.1	19.8	3.6	29.8	955.8	111.6	100.9	743.3

[1] Beginning with 1959, horses and mules are excluded.
[2] Includes all crops held on farms and crops held off farms by farmers as security for Commodity Credit Corporation loans.
[3] Beginning 1974, data are for farms included in the new farm definition, that is, places with sales of $1,000 or more annually.

Note.—Data include operator households. Beginning 1959, data include Alaska and Hawaii.

Source: Department of Agriculture.

TABLE B-99.—*U.S. international transactions, 1946–85*

[Millions of dollars; quarterly data seasonally adjusted, except as noted. Credits (+), debits (−)]

Year or quarter	Merchandise [1] [2]			Investment income [3]			Net military transactions	Net travel and transportation receipts	Other services, net [3]	Balance on goods and services [1] [4]	Remittances, pensions, and other unilateral transfers [1]	Balance on current account [1] [4]
	Exports	Imports	Net	Receipts	Payments	Net						
1946	11,764	−5,067	6,697	772	−212	560	−493	733	310	7,807	−2,922	4,885
1947	16,097	−5,973	10,124	1,102	−245	857	−455	946	145	11,617	−2,625	8,992
1948	13,265	−7,557	5,708	1,921	−437	1,484	−799	374	175	6,942	−4,525	2,417
1949	12,213	−6,874	5,339	1,831	−476	1,355	−621	230	208	6,511	−5,638	873
1950	10,203	−9,081	1,122	2,068	−559	1,509	−576	−120	242	2,177	−4,017	−1,840
1951	14,243	−11,176	3,067	2,633	−583	2,050	−1,270	298	254	4,399	−3,515	884
1952	13,449	−10,838	2,611	2,751	−555	2,196	−2,054	83	309	3,145	−2,531	614
1953	12,412	−10,975	1,437	2,736	−624	2,112	−2,423	−238	307	1,195	−2,481	−1,286
1954	12,929	−10,353	2,576	2,929	−582	2,347	−2,460	−269	305	2,499	−2,280	219
1955	14,424	−11,527	2,897	3,406	−676	2,730	−2,701	−297	299	2,928	−2,498	430
1956	17,556	−12,803	4,753	3,837	−735	3,102	−2,788	−361	447	5,153	−2,423	2,730
1957	19,562	−13,291	6,271	4,180	−796	3,384	−2,841	−189	482	7,107	−2,345	4,762
1958	16,414	−12,952	3,462	3,790	−825	2,965	−3,135	−633	486	3,145	−2,361	784
1959	16,458	−15,310	1,148	4,132	−1,061	3,071	−2,805	−821	573	1,166	−2,448	−1,282
1960	19,650	−14,758	4,892	4,616	−1,237	3,379	−2,752	−964	579	5,132	−2,308	2,824
1961	20,108	−14,537	5,571	4,999	−1,245	3,754	−2,596	−978	594	6,346	−2,524	3,822
1962	20,781	−16,260	4,521	5,618	−1,324	4,294	−2,449	−1,152	809	6,025	−2,638	3,387
1963	22,272	−17,048	5,224	6,157	−1,561	4,596	−2,304	−1,309	960	7,167	−2,754	4,414
1964	25,501	−18,700	6,801	6,824	−1,784	5,040	−2,133	−1,146	1,041	9,604	−2,781	6,823
1965	26,461	−21,510	4,951	7,437	−2,088	5,349	−2,122	−1,280	1,387	8,285	−2,854	5,432
1966	29,310	−25,493	3,817	7,528	−2,481	5,047	−2,935	−1,331	1,365	5,963	−2,932	3,031
1967	30,666	−26,866	3,800	8,020	−2,747	5,273	−3,226	−1,750	1,612	5,708	−3,125	2,583
1968	33,626	−32,991	635	9,368	−3,378	5,990	−3,143	−1,548	1,630	3,563	−2,952	611
1969	36,414	−35,807	607	10,912	−4,869	6,043	−3,328	−1,763	1,833	3,393	−2,994	399
1970	42,469	−39,866	2,603	11,747	−5,516	6,231	−3,354	−2,038	2,180	5,625	−3,294	2,331
1971	43,319	−45,579	−2,260	12,707	−5,436	7,271	−2,893	−2,345	2,495	2,269	−3,701	−1,433
1972	49,381	−55,797	−6,416	14,764	−6,572	8,192	−3,420	−3,063	2,766	−1,941	−3,854	−5,795
1973	71,410	−70,499	911	21,808	−9,655	12,153	−2,070	−3,158	3,184	11,021	−3,881	7,140
1974	98,306	−103,811	−5,505	27,587	−12,084	15,503	−1,653	−3,184	3,986	9,147	[5] −7,186	1,962
1975	107,088	−98,185	8,903	25,351	−12,564	12,787	−746	−2,812	4,598	22,729	−4,613	18,116
1976	114,745	−124,228	−9,483	29,286	−13,311	15,975	559	−2,558	4,711	9,205	−4,998	4,207
1977	120,816	−151,907	−31,091	32,179	−14,217	17,962	1,528	−3,565	5,272	−9,894	−4,617	−14,511
1978	142,054	−176,001	−33,947	42,245	−21,680	20,565	621	−3,573	6,013	−10,321	−5,106	−15,427
1979	184,473	−212,009	−27,536	64,132	−32,960	31,172	−1,778	−2,935	5,735	4,659	−5,649	−991
1980	224,269	−249,749	−25,480	72,506	−42,120	30,386	−2,237	−997	7,277	8,950	−7,077	1,873
1981	237,085	−265,063	−27,978	86,411	−52,329	34,082	−1,183	144	8,121	13,186	−6,847	6,339
1982	211,198	−247,642	−36,444	84,768	−55,273	29,495	−318	−992	8,345	84	−8,135	−8,051
1983	201,712	−268,928	−67,216	78,023	−52,621	25,402	−162	−4,721	9,557	−37,141	−8,852	−45,994
1984	219,916	−334,023	−114,107	87,609	−68,500	19,109	−1,765	−8,974	9,791	−95,945	−11,413	−107,358
1983:												
I	49,535	−58,418	−8,883	17,935	−12,283	5,652	703	−448	2,260	−716	−1,606	−2,322
II	49,048	−64,928	−15,880	19,172	−12,856	6,316	−71	−1,116	2,462	−8,289	−1,875	−10,164
III	49,992	−70,689	−20,697	20,985	−13,588	7,397	−126	−1,422	2,290	−12,558	−2,204	−14,762
IV	53,137	−74,893	−21,756	19,932	−13,893	6,039	−669	−1,735	2,544	−15,577	−3,166	−18,743
1984:												
I	53,469	−78,091	−24,622	23,502	−15,268	8,234	−346	−1,753	2,582	−15,905	−2,212	−18,117
II	54,556	−84,181	−29,625	20,895	−17,277	3,618	−593	−2,050	2,412	−26,238	−2,232	−28,470
III	55,649	−84,626	−28,977	21,769	−18,513	3,256	−250	−2,574	2,452	−26,093	−2,876	−28,969
IV	56,242	−87,127	−30,885	21,445	−17,442	4,003	−575	−2,597	2,344	−27,710	−4,095	−31,805
1985:												
I	55,302	−78,756	−23,454	18,868	−16,331	2,537	−212	−2,357	2,411	−21,075	−3,172	−24,247
II	53,624	−82,211	−28,587	22,279	−16,892	5,387	−586	−3,054	2,572	−24,268	−3,428	−27,696
III p	52,310	−85,452	−33,142	24,039	−16,490	7,549	−487	−3,026	2,623	−26,483	−3,968	−30,451

[1] Excludes military.

[2] Adjusted from Census data for differences in valuation, coverage, and timing.

[3] Fees and royalties from U.S. direct investments abroad or from foreign direct investments in the United States are excluded from investment income and included in other services, net.

[4] In concept, balance on goods and services is equal to net exports and imports in the national income and product accounts (and the sum of balance on current account and allocations of special drawing rights is equal to net foreign investment in the accounts), although the series differ because of different handling of certain items (gold, capital gains and losses, etc.), revisions, etc.

See next page for continuation of table.

Table B-99.—*U.S. international transactions, 1946–85*—Continued

[Millions of dollars; quarterly data seasonally adjusted, except as noted]

Year or quarter	U.S. assets abroad, net [increase/capital outflow (−)]				Foreign assets in the U.S., net [increase/capital inflow (+)]			Allocations of special drawing rights (SDRs)	Statistical discrepancy	
	Total	U.S. official reserve assets [6]	Other U.S. Government assets	U.S. private assets	Total	Foreign official assets	Other foreign assets		Total (sum of the items with sign reversed)	Of which: Seasonal adjustment discrepancy
1946		−623								
1947		−3,315								
1948		−1,736								
1949		−266								
1950		1,758								
1951		−33								
1952		−415								
1953		1,256								
1954		480								
1955		182								
1956		−869								
1957		−1,165								
1958		2,292								
1959		1,035								
1960	−4,099	2,145	−1,100	−5,144	2,294	1,473	821		−1,019	
1961	−5,538	607	−910	−5,235	2,705	765	1,939		−989	
1962	−4,174	1,535	−1,085	−4,623	1,911	1,270	641		−1,124	
1963	−7,270	378	−1,662	−5,986	3,217	1,986	1,231		−360	
1964	−9,560	171	−1,680	−8,050	3,643	1,660	1,983		−907	
1965	−5,716	1,225	−1,605	−5,336	742	134	607		−458	
1966	−7,321	570	−1,543	−6,347	3,661	−672	4,333		629	
1967	−9,757	53	−2,423	−7,386	7,379	3,451	3,928		−205	
1968	−10,977	−870	−2,274	−7,833	9,928	−774	10,703		438	
1969	−11,585	−1,179	−2,200	−8,206	12,702	−1,301	14,002		−1,516	
1970	−9,337	2,481	−1,589	−10,229	6,359	6,908	−550	867	−219	
1971	−12,475	2,349	−1,884	−12,940	22,970	26,879	−3,909	717	−9,779	
1972	−14,497	−4	−1,568	−12,925	21,461	10,475	10,986	710	−1,879	
1973	−22,874	158	−2,644	−20,388	18,388	6,026	12,362		−2,654	
1974	−34,745	−1,467	[5] 366	−33,643	34,241	10,546	23,696		−1,458	
1975	−39,703	−849	−3,474	−35,380	15,670	7,027	8,643		5,917	
1976	−51,269	−2,558	−4,214	−44,498	36,518	17,693	18,826		10,544	
1977	−34,785	−375	−3,693	−30,717	51,319	36,816	14,503		−2,023	
1978	−61,130	732	−4,660	−57,202	64,036	33,678	30,358		12,521	
1979	−64,331	−1,133	−3,746	−59,453	38,752	−13,665	52,416	1,139	25,431	
1980	−86,118	−8,155	−5,162	−72,802	58,112	15,497	42,615	1,152	24,982	
1981	−111,031	−5,175	−5,097	−100,758	83,322	4,960	78,362	1,093	20,276	
1982	−119,218	−4,965	−6,131	−108,122	94,447	3,672	90,775		32,821	
1983	−55,045	−1,196	−5,006	−48,843	84,322	5,795	78,526		16,717	
1984	−20,447	−3,131	−5,516	−11,800	97,319	3,424	93,895		30,486	
1983: I	−26,127	−787	−1,135	−24,205	15,158	−161	15,319		13,291	−680
II	−1,128	16	−1,263	119	15,608	1,706	13,902		−4,316	83
III	−9,814	529	−1,171	−9,172	19,539	−2,666	22,205		5,037	−2,953
IV	−17,976	−953	−1,436	−15,587	34,017	6,916	27,101		2,702	3,547
1984: I	−4,976	−657	−2,059	−2,260	19,277	−2,786	22,063		3,816	−455
II	−18,988	−566	−1,353	−17,070	41,592	−224	41,816		5,866	−573
III	18,364	−799	−1,369	20,532	3,140	−686	3,825		7,466	−3,274
IV	−14,846	−1,110	−734	−13,003	33,310	7,119	26,191		13,341	4,305
1985: I	−365	−233	−850	718	13,711	−11,204	24,915		10,901	384
II	−2,455	−356	−853	−1,246	26,313	8,465	17,849		3,837	−570
III p	−9,999	−121	−420	−9,458	33,909	2,415	31,494		6,541	−3,487

[5] Includes extraordinary U.S. Government transactions with India.

[6] Consists of gold, special drawing rights, convertible currencies, and the U.S. reserve position in the International Monetary Fund (IMF).

Note.—Quarterly data for U.S. official reserve assets and foreign assets in the United States are not seasonally adjusted.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B-100.—*U.S. merchandise exports and imports by principal end-use category, 1965–85*

[Billions of dollars; quarterly data seasonally adjusted]

Year or quarter	Exports							Imports						
			Nonagricultural products							Nonpetroleum products				
	Total	Agricultural products	Total	Industrial supplies and materials	Capital goods except automotive	Automotive	Other	Total	Petroleum and products	Total	Industrial supplies and materials	Capital goods except automotive	Automotive	Other
1965	26.5	6.3	20.2	7.6	8.1	1.9	2.6	21.5	2.0	19.5	9.1	1.5	0.9	8.0
1966	29.3	6.9	22.4	8.2	8.9	2.4	2.9	25.5	2.1	23.4	10.2	2.2	1.8	9.2
1967	30.7	6.5	24.2	8.5	9.9	2.8	3.0	26.9	2.1	24.8	10.0	2.5	2.4	9.9
1968	33.6	6.3	27.3	9.6	11.1	3.5	3.2	33.0	2.4	30.6	12.0	2.8	4.0	11.8
1969	36.4	6.1	30.3	10.4	12.4	3.9	3.7	35.8	2.6	33.2	11.7	3.4	5.1	13.0
1970	42.5	7.4	35.1	12.3	14.7	3.9	4.3	39.9	2.9	36.9	12.3	4.0	5.7	15.0
1971	43.3	7.8	35.5	10.9	15.4	4.7	4.5	45.6	3.6	41.9	13.6	4.3	7.6	16.5
1972	49.4	9.5	39.9	11.8	16.9	5.5	5.6	55.8	4.7	51.1	16.0	5.9	9.0	20.2
1973	71.4	18.0	53.4	16.9	22.0	7.0	7.6	70.5	8.4	62.1	19.2	8.3	10.7	23.9
1974	98.3	22.4	75.9	26.2	30.9	8.8	10.0	103.8	26.6	77.2	27.4	9.8	12.4	27.5
1975	107.1	22.2	84.8	26.7	36.6	10.8	10.7	98.2	27.0	71.2	23.6	10.2	12.1	25.3
1976	114.7	23.4	91.4	28.3	39.1	12.2	11.7	124.2	34.6	89.7	29.1	12.3	16.8	31.4
1977	120.8	24.3	96.5	29.7	39.8	13.5	13.5	151.9	45.0	106.9	35.0	14.0	19.4	38.6
1978	142.1	29.9	112.2	33.7	46.5	15.7	16.2	176.0	42.3	133.7	41.3	19.7	25.0	47.7
1979	184.5	35.6	148.9	51.8	58.8	18.4	19.8	212.0	60.5	151.5	48.5	25.0	26.4	51.6
1980	224.3	42.2	182.1	64.9	74.2	17.5	25.4	249.8	79.3	170.5	54.0	31.2	27.9	57.4
1981	237.1	44.0	193.1	63.3	81.6	19.8	28.3	265.1	77.8	187.3	57.4	36.7	30.9	62.3
1982	211.2	37.2	174.0	57.3	73.7	17.4	25.6	247.6	61.3	186.4	50.0	38.3	34.1	63.9
1983	201.7	37.2	164.5	52.2	68.9	18.7	24.8	268.9	55.0	213.9	54.7	43.1	43.5	72.7
1984	219.9	38.3	181.6	56.3	73.7	22.3	29.2	334.0	57.5	276.5	67.0	61.2	57.2	91.1
1983: I	49.5	8.8	40.7	13.1	17.4	4.1	6.2	58.4	10.7	47.7	12.5	9.2	9.5	16.6
II	49.0	8.8	40.2	12.9	16.8	4.6	5.9	64.9	13.8	51.2	13.2	9.8	10.5	17.6
III	50.0	9.4	40.6	12.9	17.0	4.6	6.1	70.7	16.3	54.4	14.0	11.1	10.6	18.6
IV	53.1	10.1	43.0	13.3	17.7	5.3	6.6	74.9	14.2	60.7	15.0	12.9	12.8	19.9
1984: I	53.5	10.0	43.5	13.2	17.7	5.5	7.1	78.1	13.9	64.2	15.8	13.8	13.4	21.2
II	54.6	9.5	45.1	14.2	18.2	5.4	7.3	84.2	14.9	69.2	17.4	14.9	14.2	22.8
III	55.6	9.1	46.5	14.6	18.6	5.8	7.5	84.6	14.2	70.4	16.7	16.0	14.3	23.4
IV	56.2	9.7	46.5	14.3	19.2	5.6	7.4	87.1	14.5	72.7	17.1	16.5	15.4	23.7
1985: I	55.3	8.2	47.1	13.9	19.3	6.0	8.0	78.8	10.5	68.3	15.5	15.3	14.4	23.0
II	53.6	7.1	46.5	13.2	18.8	6.2	8.3	82.2	13.1	69.1	15.6	14.8	15.6	23.1
III ᵖ	52.3	6.5	45.8	13.2	18.7	6.4	7.4	85.5	12.6	72.9	16.0	16.0	16.6	24.3

Note.—Data are on an international transactions basis and exclude military shipments.

Source: Department of Commerce, Bureau of Economic Analysis.

Table B–101.—*U.S. merchandise exports and imports by area, 1976–85*

[Millions of dollars]

Item	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985 first 3 quarters at annual rate [1]
Exports	114,745	120,816	142,054	184,473	224,269	237,085	211,198	201,712	219,916	214,981
Industrial countries	72,335	76,970	87,948	115,930	137,152	141,900	127,254	128,202	141,021	140,017
Canada	26,336	28,533	31,229	38,690	41,626	46,016	39,203	44,374	53,067	55,169
Japan	10,196	10,566	12,960	17,629	20,806	21,796	20,694	21,789	23,240	22,236
Western Europe	31,883	34,094	39,546	54,177	67,603	65,108	59,701	55,434	56,866	55,556
Australia, New Zealand, and South Africa	3,920	3,777	4,213	5,434	7,117	8,980	7,656	6,604	7,849	7,056
Other countries, except Eastern Europe	38,287	40,951	50,213	62,630	82,941	90,657	80,130	70,140	74,214	71,332
OPEC [2]	11,561	12,877	14,846	14,556	17,368	21,097	20,651	15,256	13,771	11,564
Other [3]	26,726	28,074	35,367	48,074	65,573	69,560	59,479	54,884	60,443	59,768
Eastern Europe	4,123	2,895	3,893	5,913	4,143	4,440	3,749	2,988	4,290	3,153
International organizations and unallocated					33	88	65	383	390	479
Imports	124,228	151,907	176,001	212,009	249,749	265,063	247,642	268,925	334,023	328,559
Industrial countries	67,665	79,447	99,344	112,797	127,884	144,322	144,139	159,920	207,127	212,713
Canada	26,652	29,864	33,756	39,227	42,901	48,253	48,523	56,010	69,229	70,135
Japan	15,531	18,565	24,540	26,260	31,216	37,597	37,683	42,845	60,211	62,985
Western Europe	23,003	28,226	36,608	41,817	47,235	52,864	52,900	55,624	72,054	73,979
Australia, New Zealand, and South Africa	2,479	2,792	4,440	5,493	6,532	5,608	5,033	5,444	5,633	5,619
Other countries, except Eastern Europe	55,379	70,679	74,397	96,131	119,135	119,188	102,414	107,592	124,679	114,041
OPEC [2]	27,409	35,778	33,286	45,039	55,602	49,934	31,517	25,283	26,852	20,836
Other [3]	27,970	34,901	41,111	51,092	63,533	69,254	70,897	82,309	97,827	93,205
Eastern Europe	875	1,127	1,508	1,896	1,444	1,553	1,066	1,413	2,217	1,800
International organizations and unallocated	309	654	752	1,185	1,287		23			

[1] Preliminary, seasonally adjusted.

[2] Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

[3] Latin American Republics, other Western Hemisphere, and other countries in Asia and Africa, less members of OPEC.

Note.—Data are on an international transactions basis and exclude military.

Source: Department of Commerce, Bureau of Economic Analysis.

TABLE B–102.—*U.S. merchandise exports and imports by commodity groups, 1966–85*

[Millions of dollars; monthly data seasonally adjusted]

Year or month	Merchandise exports					Merchandise imports					Merchandise trade balance		
	Total domestic and foreign exports[1]	Domestic exports				General imports[5]				Total, c.i.f. value[6]	Exports less imports, customs value	Exports less imports, f.a.s.	Exports less imports, c.i.f.
		Total[1][2]	Food, beverages, and tobacco	Crude materials and fuels[3]	Manufactured goods[4]	Total[5]	Food, beverages, and tobacco	Crude materials and fuels[3]	Manufactured goods[4]				
	F.a.s. value[7]					Customs value							
1966	29,490	29,054	5,186	4,404	19,218	25,618	4,590	5,718	14,446		3,872		
1967	31,030	30,646	4,710	4,726	20,844	26,889	4,701	5,367	15,756	28,745	4,141		2,283
1968	34,063	33,626	4,592	4,865	23,818	33,226	5,365	6,031	20,624	35,320	837		−1,257
1969	37,332	36,788	4,446	5,006	26,785	36,043	5,308	6,391	23,011	38,241	1,289		−909
1970	42,659	42,025	5,058	6,692	29,344	39,951	6,230	6,542	25,907	42,429	2,708		230
1971	43,549	42,911	5,076	6,441	30,443	45,563	6,404	7,268	30,414	48,342	−2,014		−4,793
1972	49,199	48,399	6,569	7,091	33,740	55,583	7,379	8,838	37,767	58,862	−6,384		−9,663
1973	70,823	69,730	12,938	10,735	44,731	69,476	9,235	13,446	45,001	73,573	1,348		2,752
1974	97,998	96,634	15,233	15,802	63,523	101,394	10,701	31,842	56,202	108,392	−3,396		−10,395
						F.a.s. value[7]							
1974*	98,092	96,679	15,233	15,802	63,523	102,559	10,709	32,064	55,223	110,875		−4,467	−12,783
1975*	107,652	106,161	16,793	15,197	70,951	98,503	9,923	32,596	51,080	105,880		9,149	1,772
1976*	115,223	113,549	17,234	16,095	77,241	123,477	11,891	41,474	64,775	132,498		−8,254	−17,274
1977*	121,232	119,024	15,963	18,579	80,151	150,390	14,227	53,554	76,554	160,411		−29,158	−39,179
1978*	143,681	141,142	20,604	20,957	94,473	174,757	15,743	51,901	100,317	186,045		−31,076	−42,364
1979*	181,860	178,633	24,587	28,222	116,587	209,458	17,735	71,390	112,226	222,228		−27,599	−40,368
1980	220,630	216,515	30,407	33,719	143,891	244,871	18,551	93,973	125,122	256,984		−24,241	−36,354
						Customs value							
1981	233,677	228,899	33,206	33,022	154,283	260,982	18,350	92,873	142,475	273,352	−27,305		−39,675
1982	212,193	207,076	26,977	33,518	139,716	243,952	17,817	74,404	144,022	254,885	−31,759		−42,691
1983	200,486	195,917	26,979	29,555	132,409	258,048	18,819	68,037	163,449	269,878	−57,562		−69,392
1984	217,865	212,034	27,312	31,482	143,142	325,726	21,626	72,758	221,515	341,177	−107,861		−123,312
1984:													
Jan	17,889	17,410	2,358	2,541	11,826	26,205	1,759	6,060	17,569	27,397	−8,316		−9,508
Feb	17,208	16,782	2,170	2,427	11,407	26,420	1,773	6,106	17,857	27,587	−9,212		−10,379
Mar	17,906	17,390	2,477	2,806	11,290	26,948	1,865	6,291	18,022	28,178	−9,043		10,272
Apr	17,520	17,071	2,151	2,575	11,541	28,074	2,028	6,618	18,489	29,401	−10,553		−11,880
May	17,978	17,493	2,150	2,818	11,684	26,012	1,761	5,648	17,815	27,262	−8,034		−9,284
June	17,705	17,250	1,880	2,644	11,834	25,276	1,576	6,049	16,831	26,461	−7,571		−8,755
July	19,154	18,675	2,155	2,733	12,746	31,334	2,002	6,497	21,824	32,925	−12,180		13,771
Aug	18,123	17,665	2,131	2,609	11,854	26,866	1,711	5,815	18,598	28,213	−8,743		−10,090
Sept	18,210	17,709	2,586	2,440	11,946	28,409	1,803	5,755	20,027	29,753	−10,200		−11,543
Oct	18,411	17,886	2,336	2,352	12,329	26,783	1,924	6,106	18,037	28,064	−8,372		−9,653
Nov	18,395	17,857	2,506	2,454	12,148	27,331	1,705	6,158	18,499	28,617	−8,937		−10,222
Dec	19,142	18,623	2,413	2,988	12,409	25,933	1,719	5,689	17,777	27,176	−6,791		−8,033
1985:													
Jan	19,401	18,852	2,161	2,562	13,282	28,297	1,932	5,373	19,879	29,687	−8,896		−10,285
Feb	17,853	17,358	1,995	2,542	11,967	27,985	1,817	4,988	20,347	29,299	−10,131		−11,446
Mar	18,446	17,881	1,973	2,386	12,538	28,129	2,128	4,372	20,716	29,492	−9,683		−11,046
Apr	17,779	17,298	1,913	2,336	12,141	28,295	1,804	5,764	19,812	29,629	−10,516		−11,850
May	17,414	16,893	1,603	2,164	12,166	28,685	1,919	5,609	20,198	30,080	−11,271		−12,666
June	17,438	16,858	1,614	2,181	12,127	29,425	1,912	5,958	20,653	30,853	−11,987		−13,415
July	17,412	16,857	1,604	2,265	12,010	26,630	1,641	5,100	18,901	27,920	−9,219		−10,509
Aug	17,423	16,945	1,783	2,436	11,894	26,083	1,719	4,842	18,761	27,327	−8,660		−9,904
Sept	17,732	17,241	1,709	2,369	12,145	31,764	1,903	5,573	23,291	33,282	−14,032		−15,550
Oct	17,368	16,872	1,836	2,338	11,799	27,594	1,598	5,659	19,432	28,821	−10,226		−11,453
Nov	17,976	17,482	2,128	2,368	12,134	30,285	1,865	5,656	21,833	31,657	−12,310		−13,682

[1] Department of Defense shipments of grant-aid military supplies and equipment under the Military Assistance Program are excluded from total exports.

[2] Total includes commodities and transactions not classified according to kind.

[3] Includes fats and oils.

[4] Includes machinery, transportation equipment, chemicals, metals, and other manufactures. Export data for these items include military grant-aid shipments through 1977 and exclude them thereafter.

[5] Total arrivals of imported goods other than intransit shipments.

[6] C.i.f. (cost, insurance, and freight) import value at first port of entry into United States. Data for 1967–73 are estimates.

[7] F.a.s. (free alongside ship) value basis at U.S. port of exportation for exports and at foreign port of exportation for imports.

Note.—Data are as reported by the Bureau of the Census adjusted to include silver ore and bullion reported separately prior to 1969. Trade in gold is included beginning 1974. Export statistics cover all merchandise shipped from the U.S. customs area, except supplies for the U.S. Armed Forces. Exports include shipments under Agency for International Development and Food for Peace programs as well as other private relief shipments.

Data beginning 1980 include trade of the U.S. Virgin Islands, except that for 1980 Virgin Islands exports are reflected only in the figures for domestic and foreign exports combined, total domestic exports, and trade balance.

*Data for 1974–79 for domestic and foreign exports combined, total domestic exports, total general imports, and trade balance include trade of the Virgin Islands.

Source: Department of Commerce (Bureau of the Census and International Trade Administration, Office of Trade Information and Analysis, Trade Statistics Division).

Table B–103.—*International investment position of the United States at year-end, 1977–84*

[Billions of dollars]

Type of investment	1977	1978	1979	1980	1981	1982	1983	1984
Net international investment position of the United States	72.7	76.1	94.5	106.0	140.7	147.0	106.2	28.2
U.S. assets abroad	379.1	447.8	510.6	606.9	719.7	839.0	893.8	914.7
U.S. official reserve assets	19.3	18.7	19.0	26.8	30.1	34.0	33.7	34.9
Gold	11.7	11.7	11.2	11.2	11.2	11.1	11.1	11.1
Special drawing rights	2.6	1.6	2.7	2.6	4.1	5.3	5.0	5.6
Reserve position in the International Monetary Fund	4.9	1.0	1.3	2.9	5.1	7.3	11.3	11.5
Foreign currencies	.0	4.4	3.8	10.1	9.8	10.2	6.3	6.7
Other U.S. Government assets, other than official reserve assets	49.5	54.2	58.4	63.5	68.4	74.3	79.2	84.6
U.S. loans and other long-term assets	47.7	52.3	56.5	61.8	67.0	72.7	77.6	82.7
Repayable in dollars	45.2	49.8	54.1	59.6	64.7	70.7	75.7	80.8
Other	2.6	2.4	2.4	2.2	2.3	2.0	1.9	1.8
U.S. foreign currency holdings and U.S. short-term assets	1.8	1.9	1.9	1.7	1.4	1.7	1.7	2.0
U.S. private assets	310.2	375.0	433.2	516.6	621.2	730.7	780.8	795.1
Direct investment abroad	146.0	162.7	187.9	215.4	228.3	221.8	227.0	233.4
Foreign securities	49.4	53.4	56.8	62.7	63.5	75.7	84.3	89.9
Bonds	39.3	42.1	42.0	43.5	45.8	56.7	57.7	62.0
Corporate stocks	10.1	11.2	14.8	19.2	17.7	19.0	26.6	27.9
U.S. claims on unaffiliated foreigners reported by U.S. nonbanking concerns	22.3	28.1	31.5	34.7	35.9	28.6	35.1	28.8
U.S. claims reported by U.S. banks, not included elsewhere	92.6	130.8	157.0	203.9	293.5	404.6	434.5	443.0
Foreign assets in the United States	306.4	371.7	416.1	500.8	579.0	692.0	787.6	886.4
Foreign official assets in the United States	140.9	173.1	159.9	176.1	180.4	189.2	194.5	199.0
U.S. Government securities	105.4	128.5	106.6	118.2	125.1	132.6	137.0	142.9
U.S. Teasury securities	101.1	124.0	101.7	111.3	117.0	124.9	129.7	135.4
Other	4.3	4.5	4.9	6.9	8.1	7.7	7.3	7.6
Other U.S. Government liabilities	10.3	12.7	12.7	13.4	13.0	13.7	14.3	14.7
U.S. liabilities reported by U.S. banks, not included elsewhere	18.0	23.3	30.5	30.4	26.7	25.0	25.5	26.2
Other foreign official assets	7.2	8.5	9.9	14.1	15.5	17.9	17.7	15.2
Other foreign assets in the United States	165.5	198.7	256.3	324.8	398.6	502.8	593.1	687.4
Direct investment in the United States	34.6	42.5	54.5	83.0	108.7	124.7	137.1	159.6
U.S. Treasury securities	7.6	8.9	14.2	16.1	18.5	25.8	33.9	56.9
U.S. securities other than U.S. Treasury securities	51.2	53.6	58.6	74.1	75.4	93.6	114.7	128.2
Corporate and other bonds	11.5	11.5	10.3	9.5	10.7	16.8	17.5	32.3
Corporate stocks	39.8	42.1	48.3	64.6	64.6	76.8	97.3	95.9
U.S. liabilities to unaffiliated foreigners reported by U.S. nonbanking concerns	11.9	16.0	18.7	30.4	30.6	27.5	26.8	30.5
U.S. liabilities reported by U.S. banks, not included elsewhere	60.2	77.7	110.3	121.1	165.4	231.3	280.6	312.3

Source: Department of Commerce, Bureau of Economic Analysis.

Table B-104.—*International reserves, selected years, 1952–85*

[Millions of SDRs; end of period]

Area and country	1952	1962	1972	1981	1982	1983	1984	1985
								November
All countries	49,388	62,851	147,323	363,400	360,807	393,947	436,430	430,131
Industrial countries	38,582	52,535	110,282	212,693	211,918	232,234	252,033	251,439
United States	24,714	17,220	12,112	25,502	29,918	30,831	33,517	38,246
Canada	1,944	2,561	5,572	3,717	3,428	4,016	3,246	3,110
Australia	920	1,168	5,656	1,713	6,053	8,838	7,869	5,834
Japan	1,101	2,021	16,916	25,083	22,001	*24,346	27,811	25,054
New Zealand	183	251	767	580	577	744	1,824	1,494
Austria	116	1,081	2,505	5,279	5,544	5,052	5,070	4,644
Belgium	1,133	1,753	3,564	5,451	4,757	5,699	5,853	5,564
Denmark	150	256	787	2,246	2,111	3,515	3,127	5,234
Finland	132	237	664	1,319	1,420	1,227	2,854	3,681
France	686	4,049	9,224	21,991	17,850	21,826	24,227	24,478
Germany	960	6,958	21,908	40,892	43,909	44,092	44,282	43,918
Iceland	8	32	78	199	133	144	132	163
Ireland	318	359	1,038	2,290	2,390	2,534	2,412	3,042
Italy	722	4,068	5,605	19,631	15,107	21,284	23,549	18,638
Netherlands	953	1,943	4,407	9,562	10,723	11,253	10,961	11,136
Norway	164	304	1,220	5,414	6,273	6,373	9,596	12,787
Spain	134	1,045	4,618	9,794	7,450	7,581	12,709	11,421
Sweden	504	802	1,453	3,306	3,397	4,065	4,135	3,493
Switzerland	1,667	2,919	6,961	14,925	16,930	17,275	18,520	16,824
United Kingdom	1,956	3,308	5,201	13,757	11,904	11,496	10,297	12,635
Developing countries: Total	10,272	10,202	36,083	144,377	141,023	150,241	168,261	160,238
By area:								
Africa	1,786	2,110	3,962	10,947	7,642	7,304	7,135	7,747
Asia	3,721	2,658	7,171	31,728	36,712	44,544	50,366	46,048
Europe	966	1,348	6,425	7,844	7,016	8,154	9,702	10,524
Middle East	1,183	1,805	9,436	59,819	64,094	62,254	59,483	59,913
Western Hemisphere	2,616	2,282	9,089	34,040	25,560	27,986	41,574	36,005
Memo:								
Oil-exporting countries	1,699	2,030	9,956	69,391	67,163	67,200	69,451	70,371
Non-oil developing countries	8,573	8,172	26,127	74,986	73,860	83,042	98,809	89,866

Note.—International reserves is comprised of monetary authorities' holdings of gold (at SDR 35 per ounce), special drawing rights (SDRs), reserve positions in the International Monetary Fund, and foreign exchange. Data exclude U.S.S.R., other Eastern European countries, and Cuba (after 1960).

U.S. dollars per SDR (end of period) are: 1952 and 1962—1.00000; 1972—1.08571; 1979—1.31733; 1980—1.27541; 1981—1.16396; 1982—1.10311; 1983—1.04695; 1984—.98021; and November 1985—1.09319.

Source: International Monetary Fund, "*International Financial Statistics.*"

TABLE B–105.—*Exchange rates, 1967–85*

[Cents per unit of foreign currency, except as noted]

Period	Belgian franc	Canadian dollar	French franc	German mark	Italian lira	Japanese yen
March 1973	2.5378	100.333	22.191	35.548	0.17604	0.38190
1967	2.0125	92.689	20.323	25.084	.16022	.27613
1968	2.0026	92.801	20.191	25.048	.16042	.27735
1969	1.9942	92.855	19.302	25.491	.15940	.27903
1970	2.0139	95.802	18.087	27.424	.15945	.27921
1971	2.0598	99.021	18.148	28.768	.16174	.28779
1972	2.2716	100.937	19.825	31.364	.17132	.32995
1973	2.5761	99.977	22.536	37.758	.17192	.36915
1974	2.5713	102.257	20.805	38.723	.15372	.34302
1975	2.7253	98.297	23.354	40.729	.15328	.33705
1976	2.5921	101.410	20.942	39.737	.12044	.33741
1977	2.7911	94.112	20.344	43.079	.11328	.37342
1978	3.1809	87.729	22.218	49.867	.11782	.47981
1979	3.4098	85.386	23.504	54.561	.12035	.45834
1980	3.4247	85.530	23.694	55.089	.11694	.44311
1981	2.7007	83.408	18.489	44.362	.08842	.45432
1982	2.1982	81.077	15.293	41.236	.07411	.40284
1983	1.9621	81.133	13.183	39.235	.06605	.42128
1984	1.7348	77.244	11.474	35.230	.05708	.42139
1985	1.6968	73.226	11.220	34.247	.05255	.42248
1984: I	1.8119	79.663	12.060	37.052	.06019	.43326
II	1.8095	77.366	12.004	36.891	.05967	.43539
III	1.6950	76.111	11.160	34.251	.05558	.41055
IV	1.6230	75.837	10.673	32.726	.05288	.40635
1985:						
I	1.5315	73.875	10.050	30.728	.04949	.38837
II	1.6083	73.013	10.616	32.380	.05074	.39874
III	1.7399	73.524	11.529	35.162	.05285	.41977
IV	1.9074	72.493	12.686	38.719	.05713	.48302

Period	Netherlands guilder	Swedish krona	Swiss franc	United Kingdom pound	Multilateral trade-weighted value of the U.S. dollar (March 1973 = 100)	
					Nominal	Real [1]
March 1973	34.834	22.582	31.084	247.24	100.0	100.0
1967	27.759	19.373	23.104	275.04	120.0	
1968	27.626	19.349	23.169	239.35	122.1	
1969	27.592	19.342	23.186	239.01	122.4	
1970	27.651	19.282	23.199	239.59	121.1	
1971	28.650	19.592	24.325	244.42	117.8	
1972	31.153	21.022	26.193	250.08	109.1	
1973	35.977	22.970	31.700	245.10	99.1	98.8
1974	37.267	22.563	33.688	234.03	101.4	99.2
1975	39.632	24.141	38.743	222.16	98.5	93.9
1976	37.846	22.957	40.013	180.48	105.6	97.3
1977	40.752	22.383	41.714	174.49	103.3	93.1
1978	46.284	22.139	56.283	191.84	92.4	84.2
1979	49.843	23.323	60.121	212.24	88.1	83.2
1980	50.369	23.647	59.697	232.58	87.4	84.8
1981	40.191	19.860	51.025	202.43	102.9	100.8
1982	37.473	16.063	49.373	174.80	116.6	111.7
1983	35.120	13.044	47.660	151.59	125.3	117.3
1984	31.245	12.103	42.676	133.56	138.3	128.5
1985	30.370	11.672	41.058	129.56	143.2	132.0
1984: I	32.865	12.556	45.525	143.50	131.6	122.2
II	32.738	12.492	44.514	139.58	132.8	123.1
III	30.365	11.887	40.938	129.65	141.7	132.0
IV	29.011	11.477	39.726	121.50	147.2	136.5
1985: I	27.174	10.789	36.332	111.52	156.5	144.2
II	28.685	11.179	38.565	125.56	149.1	137.0
III	31.253	11.923	42.481	137.63	139.2	128.5
IV	34.367	12.796	46.856	143.53	128.2	118.3

[1] Adjusted by changes in consumer prices.

Source: Board of Governors of the Federal Reserve System.

TABLE B–106.—*World trade: Exports and imports, 1965, 1970, 1975, and 1981–85*

[Billions of U.S. dollars]

Area and country	1965	1970	1975	1981	1982	1983	1984	1985 [1]
	Exports, f.o.b. [2]							
Developed countries [3]	131.3	226.5	584.9	1,259.3	1,195.2	1,180.4	1,256.2	1,312.7
United States	27.5	43.2	108.1	233.7	212.3	200.5	217.9	214.1
Canada	8.4	16.7	34.1	72.7	71.2	76.5	90.3	93.2
Japan	8.4	19.3	55.8	151.5	138.4	147.0	169.7	176.5
European Community [4]	65.1	113.3	299.6	612.4	590.0	574.4	584.5	616.6
France	10.2	18.1	53.1	106.4	96.7	94.9	97.6	100.0
West Germany	17.9	34.2	90.2	176.1	176.4	169.4	171.7	184.1
Italy	7.2	13.2	34.8	75.3	73.5	72.7	73.3	77.0
United Kingdom	13.8	19.4	43.4	102.2	97.0	91.6	93.8	100.6
Other developed countries	21.9	34.0	87.3	189.0	183.3	182.0	193.8	212.3
Developing countries	33.8	50.9	203.0	531.9	461.4	432.8	458.1	428.3
OPEC [5]	10.3	16.9	111.7	273.5	214.9	175.9	170.4	141.5
Other	23.5	34.0	91.3	258.4	246.5	256.9	287.7	286.8
Communist countries [6]	23.2	34.9	90.3	205.2	223.9	235.4	244.4	256.4
U.S.S.R.	8.2	12.8	33.4	79.4	87.2	91.7	91.5	100.0
Eastern Europe	11.8	18.2	45.3	83.8	91.4	96.7	101.1	102.8
China	2.0	2.2	7.1	21.5	22.9	23.5	27.4	28.0
TOTAL	188.3	312.3	878.2	1,996.4	1,880.5	1,848.6	1,958.7	1,997.4
	Imports, c.i.f. [7]							
Developed countries [3]	138.7	237.9	618.5	1,361.3	1,279.7	1,257.0	1,366.8	1,442.0
United States	23.2	42.7	105.9	273.3	254.9	269.9	341.2	357.9
Canada	8.7	14.2	36.2	70.3	58.4	65.1	78.5	82.4
Japan	8.2	18.9	57.9	142.9	131.5	126.4	136.2	136.9
European Community [4]	70.5	118.6	306.6	645.3	615.4	590.7	599.2	629.3
France	10.4	19.1	54.0	120.9	115.7	105.4	103.7	106.6
West Germany	17.6	29.9	74.9	163.9	155.4	152.9	153.0	160.3
Italy	7.4	15.0	38.5	91.0	86.2	80.4	84.2	92.8
United Kingdom	16.1	21.9	53.3	102.7	99.7	100.1	104.9	109.1
Other developed countries	28.1	43.5	111.9	229.5	219.5	204.9	211.7	235.5
Developing countries	35.2	51.4	180.2	485.5	467.3	429.5	424.2	410.1
OPEC [5]	6.4	9.9	52.1	156.1	171.4	145.6	132.8	116.9
Other	28.8	41.5	128.1	329.4	295.9	283.9	291.4	293.2
Communist countries [6]	22.5	34.1	100.8	200.1	203.1	213.1	224.4	258.9
U.S.S.R.	8.0	11.7	37.1	73.2	77.8	80.4	80.4	97.0
Eastern Europe	11.6	18.5	51.3	87.5	87.1	91.7	94.9	97.3
China	1.8	2.2	7.4	19.4	17.9	19.7	26.7	38.7
TOTAL	196.4	323.4	899.5	2,046.9	1,950.1	1,899.6	2,015.4	2,111.0

[1] Preliminary estimates.

[2] Free-on-board ship value.

[3] Includes the OECD countries, South Africa, Israel, and non-OECD Europe.

[4] Includes Belgium-Luxembourg, Denmark, Greece, Ireland, and the Netherlands, not shown separately.

[5] Includes Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

[6] Includes North Korea, Vietnam, Albania, Cuba, Mongolia, and Yugoslavia, not shown separately.

[7] Cost, insurance, and freight value, except Eastern Europe (except Hungary) and U.S.S.R., which are f.o.b. (free on board).

Sources: International Monetary Fund, Organization for Economic Cooperation and Development, and Council of Economic Advisers.

TABLE B–107.—*World trade balance and current account balances, 1965, 1970, 1975, and 1981–85*

[Billions of U.S. dollars]

Area and country	1965	1970	1975	1981	1982	1983	1984	1985 [1]
	World trade balance [2]							
Developed countries [3]	–7.4	–11.4	–33.6	–102.0	–84.5	–76.6	–110.6	–129.3
United States	4.3	.5	2.2	–39.6	–42.6	–69.4	–123.3	–143.8
Canada	–.3	2.5	–2.1	2.4	12.8	11.4	11.8	10.8
Japan	.2	.4	–2.1	8.6	6.9	20.6	33.5	39.6
European Community [4]	–5.4	–5.3	–7.0	–32.9	–25.4	–16.3	–14.7	–12.7
France	–.2	–1.0	–.9	–14.5	–19.0	–10.5	–6.1	–6.6
West Germany	.3	4.3	15.3	12.2	21.0	16.5	18.7	23.8
Italy	–.2	–1.8	–3.7	–15.7	–12.7	–7.7	–10.9	–15.8
United Kingdom	–2.3	–2.5	–9.9	–.5	–2.7	–8.5	–11.1	–8.5
Other developed countries	–6.2	–9.5	–24.6	–40.5	–36.2	–22.9	–17.9	–23.2
Developing countries	–1.4	–.5	22.8	46.4	–5.9	3.3	33.9	18.2
OPEC [5]	3.9	7.0	59.6	117.4	43.5	30.3	37.6	24.6
Other	–5.3	–7.5	–36.8	–71.0	–49.4	–27.0	–3.7	–6.4
Communist countries [6]	.7	.8	–10.5	5.1	20.8	22.3	20.0	–2.5
U.S.S.R.	.2	1.1	–3.7	6.2	9.4	11.3	11.1	3.0
Eastern Europe	.2	–.3	–6.0	–3.7	4.3	5.0	6.2	5.5
China	.2	.0	–.3	2.1	5.0	3.8	.7	–10.7
TOTAL [7]	–8.1	–11.1	–21.3	–50.5	–69.6	–51.0	–56.7	–113.6
	Current account balances [8]							
Developed countries [3]	3.2	4.7	0.1	–31.2	–32.7	–25.0	–66.3	–53.6
United States	5.4	2.3	18.1	6.3	–8.0	–40.8	–101.5	–109.9
Canada	–1.0	1.1	–4.7	–5.1	2.2	1.4	2.0	.0
Japan	.9	2.0	–.7	4.8	6.8	20.8	35.0	47.5
European Community [4]	.8	2.8	3.3	–12.2	–11.1	4.5	3.8	11.7
France	.3	.1	2.7	–4.7	–12.1	–4.4	–.8	.7
West Germany	–1.6	.9	4.0	–5.5	3.4	4.1	6.3	12.7
Italy	2.2	.8	–.6	–8.1	–5.5	.8	–3.0	–7.2
United Kingdom	–.1	2.0	–3.3	13.1	8.1	4.8	1.2	4.2
Other developed countries	–2.9	–3.5	–15.9	–25.0	–22.6	–10.9	–5.6	–2.9
Developing countries	....	–8.5	2.3	–30.2	–79.2	–55.1	–36.4	–53.0
OPEC [5]	....	–.5	27.0	46.6	–18.6	–20.5	–18.1	–26.0
Other	....	–8.0	–24.7	–76.8	–60.6	–34.6	–18.3	–27.0
Communist countries [9]	....	–.8	–11.1	–.6	13.8	13.9	10.5	....
U.S.S.R.	–.2	.1	–4.6	–.2	4.3	4.7	4.5	0
Eastern Europe	....	–.8	–6.4	–3.7	1.7	3.8	4.0	1.5
China	....	–.1	–.1	3.3	7.8	5.4	2.0	....
TOTAL	....	–4.6	–8.7	–62.0	–98.1	–66.2	–92.2	....

[1] Preliminary estimates.

[2] Exports f.o.b. (free-on-board ship value) less imports c.i.f. (cost, insurance, and freight).

[3] Includes the OECD countries, South Africa, Israel, and non-OECD Europe.

[4] Includes Belgium-Luxembourg, Denmark, Greece, Ireland, and the Netherlands, not shown separately.

[5] Includes Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

[6] Includes North Korea, Vietnam, Albania, Cuba, Mongolia, and Yugoslavia, not shown separately.

[7] Asymmetries arise in global payments aggregations because of discrepancies in coverage, classification, timing, and valuation in the recording of transactions by the countries involved and because freight charges are attributed to the cost of imports.

[8] OECD basis.

[9] Includes only countries listed.

Sources: International Monetary Fund, Organization for Economic Cooperation and Development, and Council of Economic Advisers.

TABLE B-108.—*Industrial production and consumer prices, major industrial countries, 1960–85*

Year or quarter	United States	Canada	Japan	European Community[1]	France	West Germany	Italy	United Kingdom
	Industrial production (1977=100)[2]							
1960	48.8	41.3	18.3	51.2	44	51.6	40.8	67.5
1961	49.1	50.0	27.1	53.5	47	54.5	45.1	67.8
1962	53.2	46.6	29.2	55.7	50	56.6	49.6	68.4
1963	56.3	49.6	32.5	58.1	56	58.2	54.0	70.7
1964	60.1	54.1	37.7	62.3	60	63.3	56.1	76.4
1965	66.1	58.7	39.2	64.9	61	66.9	58.7	78.6
1966	72.0	63.0	44.2	67.4	64	67.5	65.6	79.8
1967	73.5	65.5	52.8	68.5	66	65.5	70.7	80.4
1968	77.6	69.7	60.8	73.6	68	71.5	74.8	86.5
1969	81.2	74.5	70.4	80.5	75	80.6	77.6	89.5
1970	78.5	75.5	80.1	84.5	79	85.8	82.6	89.9
1971	79.6	79.6	82.3	86.4	84	87.5	82.2	89.5
1972	87.3	85.6	86.8	90.2	88	90.8	86.2	91.1
1973	94.4	94.7	99.0	96.8	95	96.7	94.5	99.2
1974	93.0	97.7	96.7	97.5	98	96.4	98.3	97.3
1975	84.8	91.9	86.5	91.0	91	90.5	89.6	92.1
1976	92.6	97.5	96.1	97.7	98	98.7	100.0	95.1
1977	100.0	100.0	100.0	100.0	100	100.0	100.0	100.0
1978	106.5	103.3	106.4	102.3	102	102.6	101.9	103.0
1979	110.7	109.7	113.9	107.4	107	107.4	108.8	106.9
1980	108.6	108.1	119.2	106.7	106	107.6	114.4	99.8
1981	111.0	108.6	120.4	104.2	106	105.7	112.6	96.4
1982	103.1	97.9	120.9	102.6	104	102.7	109.2	98.2
1983	109.2	102.8	125.1	103.5	105	103.4	105.6	101.7
1984	121.8	111.8	138.9	106.5	106	106.8	109.2	102.9
1985 p	124.5							
1984: I	119.3	109.6	134.2	106.4	107	106.9	108.0	104.1
II	121.5	110.5	137.5	104.3	105	102.5	108.6	102.2
III	123.4	113.9	139.9	107.7	107	108.7	110.5	102.2
IV	123.1	113.8	143.5	107.5	106	110.3	108.6	103.3
1985: I	123.8	114.0	142.6	108.5	106	110.8	110.5	105.8
II	124.2	115.3	146.2	109.6	106	112.1	110.9	108.0
III	124.8	118.4	146.5	110.3	106	114.2	110.1	107.6
IV p	125.2							
	Consumer prices (1967=100)							
1960	88.7	85.9	68.3	79.2	[3] 78.0	82.9	74.1	79.0
1961	89.6	86.7	71.8	81.2	[3] 80.6	84.8	75.7	81.6
1962	90.6	87.7	76.7	84.3	85.4	87.4	79.2	85.1
1963	91.7	89.2	82.5	87.6	89.5	89.9	85.1	86.8
1964	92.9	90.9	85.8	90.7	92.5	92.0	90.1	89.6
1965	94.5	93.1	91.6	94.1	94.8	95.0	94.2	93.9
1966	97.2	96.5	96.3	97.5	97.4	98.4	96.4	97.6
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	104.2	104.0	105.3	103.7	104.5	101.6	101.4	104.8
1969	109.8	108.8	110.9	107.9	111.3	103.5	104.1	110.3
1970	116.3	112.4	119.3	113.2	117.1	107.1	109.2	117.4
1971	121.3	115.6	126.5	120.2	123.5	112.7	114.4	128.5
1972	125.3	121.2	132.3	127.5	131.1	119.0	121.0	137.7
1973	133.1	130.3	147.9	138.2	140.7	127.2	134.0	150.2
1974	147.7	144.5	184.0	156.2	160.0	136.1	159.7	174.3
1975	161.2	160.1	205.8	176.7	178.9	144.2	186.8	216.5
1976	170.5	172.1	224.9	195.2	196.1	150.5	218.1	252.4
1977	181.5	185.9	243.0	214.3	214.5	156.0	255.2	292.4
1978	195.4	202.5	252.3	229.2	233.9	160.2	286.2	316.6
1979	217.4	221.0	261.3	250.0	259.1	166.9	328.5	359.0
1980	246.8	243.5	282.3	280.9	294.2	175.8	398.0	423.6
1981	272.4	273.9	296.2	312.1	332.7	186.9	472.4	473.9
1982	289.1	303.5	304.1	343.3	373.1	196.8	549.4	514.7
1983	298.4	321.0	309.7	368.3	407.9	203.3	631.8	538.3
1984	311.1	335.0	316.6	390.7	439.5	208.2	698.8	565.1
1985	322.2	348.2						
1984: I	306.4	330.7	313.9	383.1	428.1	207.0	684.9	552.5
II	309.7	333.6	316.6	389.3	436.1	208.0	699.6	563.7
III	313.1	336.7	316.0	393.0	443.7	208.0	709.0	568.6
IV	315.4	339.0	319.9	398.0	450.2	209.6	724.7	575.6
1985: I	317.4	343.0	320.1	404.2	456.1	211.8	743.5	582.9
II	321.2	346.8	322.9	411.8	464.4	213.1	760.4	602.9
III	323.6	350.0	322.8	414.0	468.7	212.6	768.7	604.5
IV	326.5	353.2						

[1] Consists of Belgium-Luxembourg, Denmark, France, Greece, Ireland, Italy, Netherlands, United Kingdom, and West Germany. Industrial production prior to July 1981 excludes data for Greece, which joined the EC in 1981.

[2] All data exclude construction. Quarterly data are seasonally adjusted.

[3] Data for 1960 and 1961 are for Paris only.

Sources: Department of Commerce (International Trade Administration, Office of Trade Information and Analysis, Trade Statistics Division) and Department of Labor (Bureau of Labor Statistics).

TABLE B-109.—*Civilian unemployment rate, and hourly compensation, major industrial countries, 1960–85*

[Quarterly data seasonally adjusted]

Year or quarter	United States	Canada	Japan	France	West Germany	Italy	United Kingdom
	Civilian unemployment rate (percent)[1]						
1960	5.5	6.5	1.7	1.6	1.1	3.2	2.0
1961	6.7	6.7	1.5	1.4	.6	2.8	1.8
1962	5.5	5.5	1.3	1.3	.6	2.5	2.6
1963	5.7	5.2	1.3	1.2	.5	2.1	3.2
1964	5.2	4.4	1.2	1.3	.4	2.4	2.3
1965	4.5	3.6	1.2	1.4	.3	3.0	2.0
1966	3.8	3.4	1.4	1.7	.3	3.3	2.1
1967	3.8	3.8	1.3	1.8	1.3	3.0	3.1
1968	3.6	4.5	1.2	2.4	1.1	3.1	3.1
1969	3.5	4.4	1.1	2.2	.6	3.1	2.9
1970	4.9	5.7	1.2	2.5	.5	2.8	3.0
1971	5.9	6.2	1.3	2.7	.6	2.9	3.8
1972	5.6	6.2	1.4	2.8	.7	3.4	4.1
1973	4.9	5.5	1.3	2.7	.7	3.2	3.1
1974	5.6	5.3	1.4	2.8	1.6	2.8	3.0
1975	8.5	6.9	1.9	4.2	3.4	3.0	4.5
1976	7.7	7.1	2.0	4.5	3.4	3.4	5.9
1977	7.1	8.1	2.0	4.8	3.5	3.6	6.3
1978	6.1	8.3	2.3	5.3	3.4	3.7	6.2
1979	5.8	7.4	2.1	6.1	3.0	3.9	5.3
1980	7.1	7.5	2.0	6.4	2.9	3.9	6.8
1981	7.6	7.5	2.2	7.5	4.1	4.3	10.4
1982	9.7	11.0	2.4	8.4	5.9	4.8	11.8
1983	9.6	11.9	2.7	8.6	7.5	5.3	12.8
1984	7.5	11.3	2.8	10.1	7.8	5.9	13.0
1985	7.2	10.5				6.1	
1984: I	7.9	11.4	2.8	9.6	7.8	6.0	12.8
II	7.5	11.4	2.7	10.1	7.9	6.0	12.9
III	7.4	11.2	2.8	10.3	7.9	5.8	13.2
IV	7.2	11.1	2.7	10.4	7.8	5.8	13.0
1985: I	7.3	11.1	2.6	10.5	7.9	5.9	13.1
II	7.3	10.6	2.6	10.5	8.0	5.9	13.3
III	7.2	10.3	2.5	10.5	7.9	6.2	13.5
IV	7.0	10.2				6.3	
	Manufacturing hourly compensation (1977 = 100)[2]						
1960	36.5	29.7	6.6	15.1	10.5	11.9	23.9
1961	37.5	29.2	7.7	16.7	12.2	13.1	25.6
1962	39.0	28.4	8.8	18.5	13.9	15.5	26.9
1963	40.2	29.2	9.8	20.1	14.8	18.3	28.1
1964	41.8	30.3	11.0	21.9	16.1	20.4	29.9
1965	42.7	31.8	12.4	23.7	17.6	21.8	32.8
1966	44.6	34.4	13.6	25.1	19.1	22.8	35.5
1967	46.8	36.9	15.3	26.9	20.2	25.4	36.0
1968	50.2	39.7	17.9	30.3	21.7	27.1	33.6
1969	53.7	42.7	21.3	30.8	24.2	30.7	36.6
1970	57.3	47.4	25.4	32.4	30.6	36.8	42.4
1971	60.8	52.7	30.3	36.8	35.9	43.1	50.0
1972	64.2	57.6	40.1	44.2	43.5	52.3	57.6
1973	68.8	62.8	55.0	57.7	59.3	66.4	63.2
1974	76.2	74.4	67.1	63.3	69.3	74.0	76.7
1975	85.1	81.7	77.1	87.9	80.2	95.0	95.6
1976	92.1	96.9	82.3	91.4	84.3	89.5	92.0
1977	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1978	108.2	99.5	136.1	124.2	124.7	119.1	128.4
1979	118.6	107.3	138.5	149.9	146.2	143.1	166.8
1980	132.4	118.7	143.8	172.5	159.8	165.3	217.0
1981	145.2	134.3	158.0	154.8	137.8	152.8	215.3
1982	157.5	143.9	147.2	151.4	134.7	154.7	202.1
1983	163.2	153.9	159.5	146.7	133.4	161.0	187.9
1984	169.1	148.8	164.7	139.3	124.1	153.8	178.7
1985	176.5						

[1] Civilian unemployment rates, approximating U.S. concepts. Data for United Kingdom exclude Northern Ireland. Quarterly data for France, West Germany, and United Kingdom should be viewed as less precise indicators of unemployment under U.S. concepts than the annual data. Beginning 1977, changes in the Italian survey resulted in a large increase in persons enumerated as unemployed. However, many also reported that they had not actively sought work in the past 30 days. Such persons have been provisionally excluded for comparability with U.S. concepts; their inclusion would more than double the rates shown for Italy.

[2] Hourly compensation in manufacturing, U.S. dollar basis. Data relate to all employed persons (wage and salary earners and the self-employed) in the United States and Canada, and to all employees (wage and salary earners) in the other countries. For France and United Kingdom, compensation adjusted to include changes in employment taxes that are not compensation to employees, but are labor costs to employers.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE B-110.—*Growth rates in real gross national product, 1961–85*

[Percent change]

Area and country	1961–65 annual average	1966–70 annual average	1971–75 annual average	1976–80 annual average	1981	1982	1983	1984	1985 [1]
Developed countries [2]	5.2	4.8	3.7	3.2	0.4	−0.1	0.5	0.9	(3)
United States	4.6	3.0	2.2	3.4	1.9	−2.5	3.5	6.5	2.3
Canada	5.7	4.7	5.0	3.3	4.0	−4.3	2.8	5.4	4.0
Japan	10.0	11.3	4.6	5.1	4.2	3.1	3.3	5.8	5.0
European Community [4]	4.7	4.4	2.7	3.0	−.2	.5	1.2	2.1	2.2
France	5.8	5.4	4.0	3.3	.5	1.8	.7	1.3	1.0
West Germany	5.0	4.2	2.1	3.4	.2	−.6	1.2	2.6	2.2
Italy	5.2	6.2	2.4	3.8	.2	−.5	−.4	2.6	2.2
United Kingdom	3.2	2.5	2.1	1.6	−1.4	1.5	3.4	1.8	3.2
Developing countries	6.3	6.7	7.0	5.6	1.4	.9	.4	3.0	(3)
Communist countries [5]	4.4	5.0	4.2	2.8	2.0	2.6	3.6	3.2	3.6
U.S.S.R.	5.0	5.3	3.7	2.6	1.9	2.5	3.6	2.0	3.0
Eastern Europe	3.9	3.8	4.9	1.9	−1.0	1.0	1.6	3.1	1.8
China	−.2	8.3	5.5	9.0	4.9	8.3	9.1	12.0	12.0

[1] Preliminary estimates.
[2] Includes the OECD countries, Israel, South Africa, and non-OECD Europe.
[3] Not available.
[4] Includes Belgium-Luxembourg, Denmark, Greece, Ireland, and the Netherlands, not shown separately.
[5] Includes North Korea and Yugoslavia, not shown separately.

Sources: Department of Commerce, International Monetary Fund, Organization for Economic Cooperation and Development (OECD), and Council of Economic Advisers.